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EDGE

DREAMCAST ■ PLAYSTATION ■ PS2 ■ N64 ■ PC ■ X-BOX ■ DOLPHIN

Nintendo's next
Dolphin and Game Boy Advance: exclusive reports

G-Surfers
How the entire planet Earth is being built inside a PS2

Sega's nightmare
Developers like it, publishers do not: where now for DC?

Criterion Studios
Inside the company striving to ease the pain of PS2 coding



PSone

Why Sony is reinventing the world's favourite videogame console



It was not so long ago that everything Sony Computer Entertainment touched turned to gold. Sure, no one really expected the company to make an entry into the world of videogame hardware manufacture and rock it to its very foundations. But since 1994, when the first ever PlayStation made the leap from Japanese store shelf to eager consumer's embrace, the company has pushed aside established veterans Nintendo and Sega like so much rubbish.

Generational transition, however, is a particularly awkward beast to fight, and it is an enemy Sony now faces squarely in the face.

Following wildly over-inflated consumer expectation, PlayStation2 was never going to replicate the impact of its precursor. Now, Sony finds itself being questioned – something it has no real experience of. Its solution? Manifold: it has announced the existence of a hard disk add-on for its 128bit platform (see p13), and underlined the fact that (with practical broadband comms still some way off) PlayStation2 will be compatible with modems in existence today. Moreover, it is pledging renewed support to the format that put it where it is today by rethinking the machine's appearance and throwing in some fashionable mobile phone connectivity to boot (see p6).

Looking at how Sega handled its Mega Drive-to-Saturn transition, bungling halfway-house launches in the form of the Mega CD and 32X along the way, it's easy to see how a company complacent with its lot can so easily fall on its backside. Nintendo, too, famously struggled to build support for its push beyond 16bit.

Were it not for the existence of X-Box, perhaps SCE would not look like a company about to encounter choppy waters. But by announcing a PS2 hard disk and shouting about modem compatibility, the company is simply matching its box up to the features of the Microsoft console format that has been so openly applauded by the industry.

Is relaunching the original PlayStation simply a matter of Sony falling back on what it knows? Even if it is, developers already heavily committed to PS2 will be hoping that the company is not spreading itself too thinly, and that massmarket consumers will not be confused by the existence of two super-similarly branded products.

One thing is certain: developers are most comfortable with just one target box, and by preparing various different models of PS2 hard drive (specifics are currently cloudy) Sony is not making its console more attractive to game creatives but in fact much less so. Its competitors should now be feeling a level of optimism much higher than when they were simply looking on, nervously wondering what this consumer tech giant could possibly bring to the videogame party back in the mid-'90s.

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PSone 06

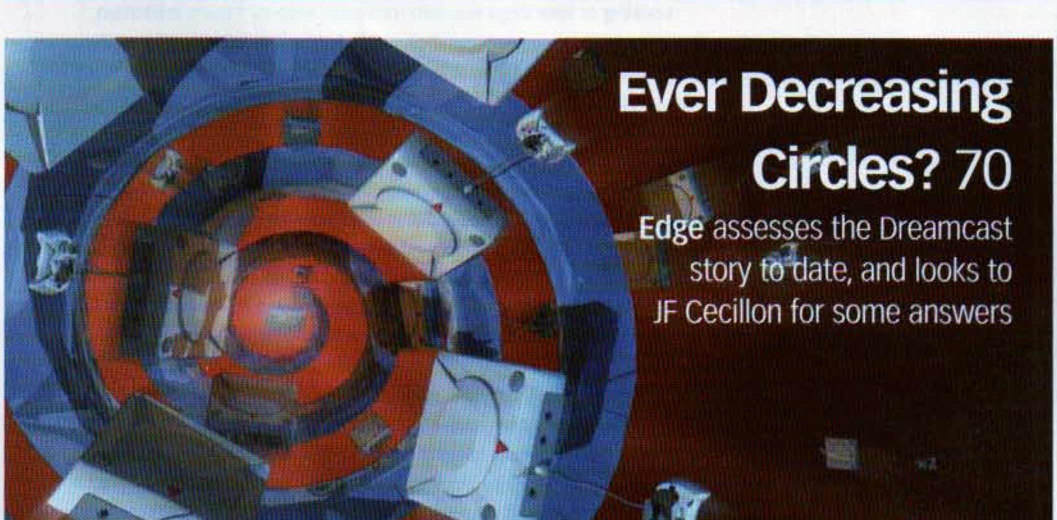
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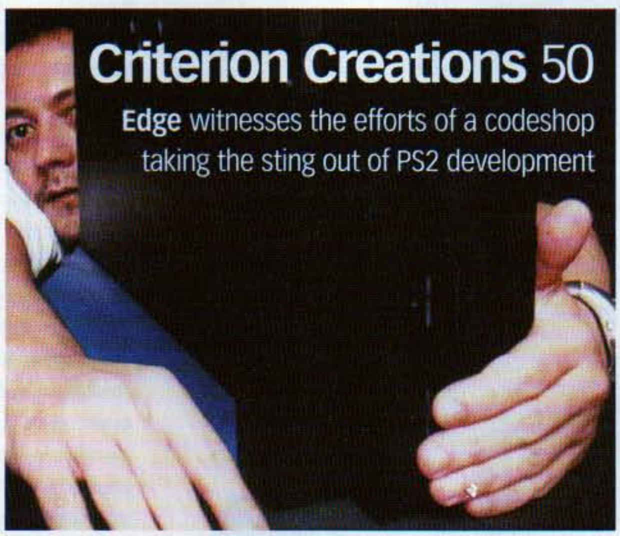
Argonaut shares world-exclusive shots of its first X-Box project with **Edge** readers



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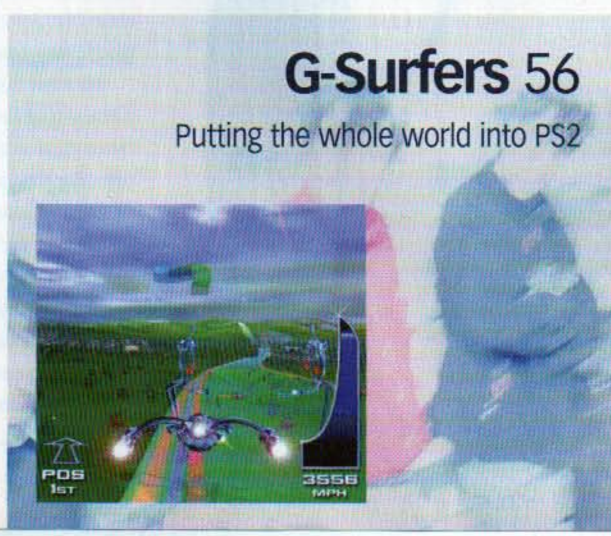


Inside Konami's explosive PS2 mecha actioner



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Edge witnesses the efforts of a codeshop taking the sting out of PS2 development



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Putting the whole world into PS2

Cutting Edge

The latest news from the world of interactive entertainment

SONY LOOKS BACKWARDS WITH NEW PLAYSTATION 1

Repackaged, rebranded 32bit console intended to drive company's fortunes in the face of Euro next-generation debut



With dimensions of 193mm (W)x38mm(H)x144mm(D), PSone is considerably smaller than the existing PS unit. It retails at ¥15,000 (£95)

Sony has released a redesigned and rebranded PlayStation for the Japanese market, with a western launch planned before the end of the year. Christened PSone, the new model boasts the same tech specs as the grey box that has now sold more than 73m units since its launch in 1994.

The new, more rounded and compact design is two thirds of the size of the original unit. An LCD monitor add-on, replete with stereo speakers system, is due to be released next spring in Japan, but, more significantly, this winter will see the Japanese release of a special adapter cable, compatible with both PSone and PS2, which will enable the units to connect to mobile phones.

With PSone set to make its Euro debut prior to the October launch of PS2, **Edge** spoke to SCEE president **Chris Deering** about the logic behind the move, as well as plans for Europe.

The reduced size of the unit has prompted some speculation that Sony is throwing its weight behind a move into the portable market, but Deering points out that this is not entirely the case. "There may be some overlap of appeal," he says, "but it's not aimed specifically at that market. It's an enhanced version of the PlayStation that's been around and has reached dozens of millions of PAL television territory homes, and for which there's an ongoing demand. Given the portability, or mobility feature, of the lighter weight PSone with its own screen, it could expand beyond home entertainment maybe into the car, or into the back yard if you've got an extension cord. There are attempts to determine whether there's a battery configuration that could eventually work with the screen feature, and if there's any way to deliver a reliable result. Of course, it makes sense for us to do that, but no specific plans have been announced."

According to Deering, the main rationale for the rebranding is simply to differentiate the machine from the newer PS2. "Since PS2 is on the map and in the stores alongside it, I think that it's quite logical to distinguish the two by calling the original PlayStation configuration PSone," he says. Nevertheless, the two remain under the umbrella of the PlayStation brand that has become ubiquitous across Europe. And with Sony diluting the focus of PS2 to extend its appeal outside the traditional hardcore gamer set, there may be a danger that releasing an older console that has been upgraded to feature network connectivity will simply confuse consumers.

Deering disagrees: "I think it will be quite obvious in the store with the two packages which is the new PS2. The timing of the arrival of PSone [in PAL territories] is closer to the timing of PS2 than it was in Japan, and so it will be necessary to make it as clear as possible which is which, but I think that as the current PlayStation in its current box works through and the only PlayStation model remaining in the stores is the new one, it should settle down and there shouldn't be any real confusion."

Indeed, he points to the possibility of households owning more than one PlayStation, and the continuing appeal of the 32bit machine at a lower price point. "We're amazed at how vibrant the demand is for PlayStation, even in the midst of all the publicity and anticipation of PS2, and it's just a function of the ubiquity of the format. Clearly, with the difference in price point with PS2, that attractiveness could apply to a much broader group of people, not only by age group but by geographic location and income level. So the positioning will be fairly broad, but if we were to force a distinction it will probably be for younger kids as maybe a second PlayStation – in the bedroom with PS2 in the living room. There's no reason to assume that there won't be some people in the 18 to 24-year-old group that will still want to own a PSone – what with the range of software – or prepare themselves with the PSone collection of titles to graduate to PS2 when they're ready, or when they can afford it. The backward compatibility feature links everything together."



Chris Deering is confident that network connectivity via a mobile phone will be coming to a PlayStation near you, but the European wireless landscape is more splintered than Japan's

"Given the installed base worldwide plus whatever PS2 adds to that as backward compatible... there should be a very attractive market for developers to invest in"

Finding the content

Whether developers will continue to support the format is another question. Certainly many developers are gearing up for the launch of PS2, but the recent changes to the pricing structure of PlayStation games has demonstrated the continued willingness to embrace the format. "I think that given the installed base worldwide plus whatever PS2 adds to that as backward compatible, and whatever the additional sales of the new PSone add, there should be a very attractive market for developers to invest in, and on our map we have about as many titles coming out this year as came out last year on PSone," says Deering. "We can't see out to three or four years in the future, but from our discussions with publishers and developers, there's certainly a broad interest in continuing to write for the PSone format. And we will be doing some even in our own studios and with the affiliates that we sometimes represent on a distribution basis."

The most intriguing feature of the revised PlayStation is undoubtedly the possibility of network connectivity through a mobile phone, but unfortunately details concerning the way this will work in Europe are unclear at present. What is clear is that, in contrast to Japan, where NTT DoCoMo's iMode service is the most popular means to access the Internet, the western cellular landscape is a more fragmented one, with wireless Internet access still a largely underpenetrated technology. Nevertheless, Deering is certain that such a function will be supported in due course. "I'm not sure about the timing, but I'm sure it will come to the UK and to Europe and to the States." Of course, this will depend on the network operators themselves. "There's a changing landscape with WAP," says Deering, "and on the horizon GPRS, UMTS, 3G and a few others are creeping in, so it's not as easy to anticipate which types of phones there will be cables for, and they may not necessarily be packed in with PSone – they'll probably be sold as separate accessories because of the divergence of options. We're very excited about it, and we have a lot of ideas, but it's fair to say that the map of cellphone formats in Europe and the States is far less clear than Japan, so we're not at a point in time where it makes sense for us to lock on to anything."

Sony is hedging its bets on more than one front, but it remains to be seen whether a diversified portfolio of PlayStation products is the key to success in the next-generation console market. With PS2 seemingly boasting every type of connectivity and apparently being marketed as a multimedia device, featuring DVD playback and compatibility with digital cameras, there is every danger that the company will alienate consumers who have hitherto been attracted by the simplicity of consoles. By continuing to market the original PlayStation – albeit a rebranded one – Sony runs the risk of further diluting its focus and alienating consumers. Although Japanese take-up of PS2 has set new standards for console launches, the competition that Sony will soon face will be stiffer than ever.

PS2 DVD gets remote control

Chinese company EMS, a known supplier of mod chips, has launched a PS2 remote control unit in the east. Plugged into the memory card slot, the device only works with the original PS2 DVD drivers, and automatically makes the host console's DVD playback free of all region constraints.





DOLPHIN AND GBA DETAILS EMERGE AS SPACEWORLD LOOMS

Developers share thoughts and feelings on next-generation Nintendo systems as flagship Tokyo event prepares for lift-off

Nintendo is set to demonstrate its Dolphin and Game Boy Advance hardware at Tokyo's SpaceWorld show in September, but **Edge** has gleaned information on both systems from industry sources in the run up to the event.

Dolphin dev kits have now shipped to a select bunch of codeshops. "We were surprised," revealed one source, "because the early systems we have are all Macintosh-based, as Mac systems are evidently much closer to Dolphin than PC." The PowerPC nature of the final box's CPU accounts for such architecture, yet it is proving an interesting shift for coders working on the platform. "We've had to ship in a whole load of new kit," **Edge**'s source continued, "and it's created quite a stir."

Another source claimed that implementation of hardware

"The early systems we have are all Macintosh-based, as Mac systems are evidently much closer to Dolphin than PC. We've had to ship in new kit... it's created quite a stir"

effects still troubling PS2 coders are a relative simplicity on the format. Steady generation of around 10m polygons per second with texture filtering, antialiasing and other effects enabled is been reported. Such performance can clearly be equalled on Sony's machine, but only through attentive programming. As with X-Box, ease of coding seems to be high on Dolphin's spec list.

Interestingly, though, one source, working in an environment where several dev kits are in place, claims that different teams are approaching the hardware in different ways. "You have one team attempting to reach a goal one way," he claimed, "and another team working towards much the same goal approaching it in another." He refused to be drawn on whether or not this was an illustration of any deficiency in libraries supplied by Nintendo.

Much speculation has concerned the Dolphin controller co-devised by Shigeru Miyamoto. "I know some guys here have seen it," said **Edge**'s source, "but it's wrapped up in so much secrecy you'd be amazed. From what I can tell, though, it *is* going to be something special."

Nintendo's future from the top

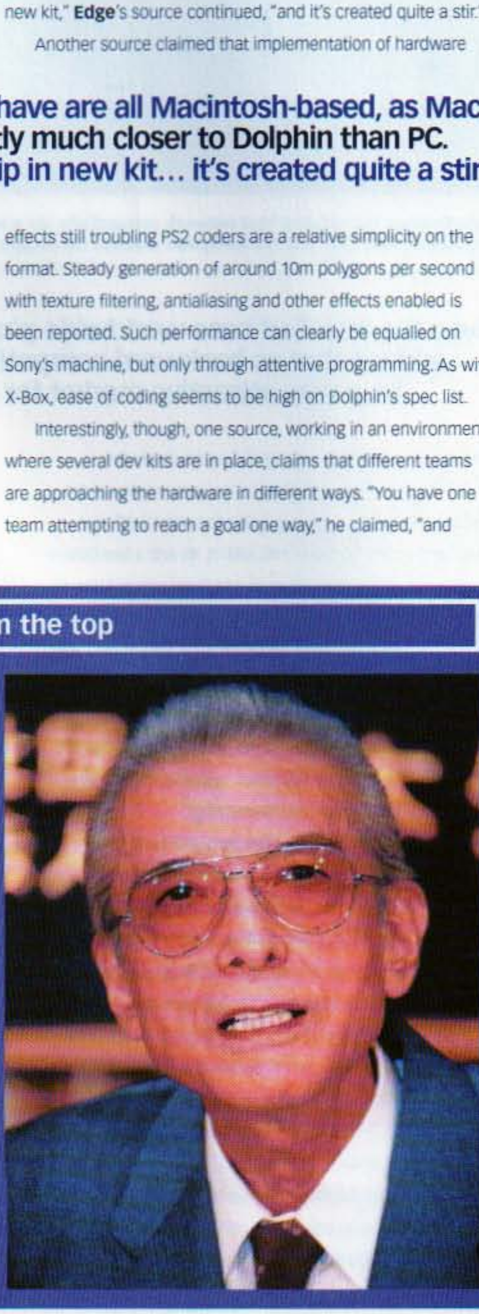
Nintendo Company Ltd chairman **Hiroshi Yamauachi** recently spoke about the company's plans for the future, not resisting the opportunity to have a dig at its competition.

He confirmed what most already knew – that Nintendo was building Internet connectivity into the box from the word outset.

Unsurprisingly, Nintendo plans to leverage its most popular franchises on the Dolphin format, with several Mario titles, and even one starring Luigi, in the works.

"We are planning to introduce an Internet business next March of April," Yamauchi-san revealed. "The first step will be online sales of a brand-new type of Pokémon cards."

In conclusion, the bullish chairman said: "If we release software for the [Dolphin] console similar to what Sony has for PlayStation2, that would be a failure."



Game Boy Advance uncovered

Other leading developers have been sharing views concerning Game Boy Advance. Asked how the system stacks up, one source said: "There's not much to say about it apart from the fact that it uses an ARM CPU for everything – which is no bad thing."

The CPU – designed by Cambridge-based ARM – is a 60MHz unit. **Edge**'s source continued: "The architecture's like an Amiga and a SNES, but the audio capabilities aren't quite up to the SNES. It has everything anyone ever needed for 2D work – it's not built for 3D in the traditional sense – including FMV potential. All the example code provided with the development kit is pretty crappy, but it gets the point across and I guess that's all that's necessary."

"It's kind of like the PC Engine used to be," another source told **Edge**. "You can have a large number of sprites on the screen and they scroll and they can blend, and they rotate as well, so it does Mode 7-style effects. Ultimately you can do whatever you want with the processor. It's not going to set the world alight with its CPU power, but it's sweet. It's miles more powerful than the old Game Boy, but I'm surprised it isn't even more powerful, considering the technologies that are available today.

"In terms of 2D abilities it's probably a little bit less powerful than a SNES. In terms of 3D abilities it's probably like a SNES with a SuperFX chip, so it's got crude but fair 3D abilities. There'll be some great scrolling games, but there'll also be a couple of simple 3D games on it."

Few have seen the final hardware design of the unit, although one source told **Edge** that it will feature standard Game Boy-style buttons, in addition to two shoulder buttons.

Nintendo has already announced that the Advance will feature mobile phone connectivity, enabling the download of software, chat and email. According to one developer working with the hardware, however: "We've had nothing on connectivity yet, which is a bit of a shame."

Certainly the market for mobile gaming is set to explode, with 700m network-enabled mobile phones predicted to be in worldwide circulation by 2006. It seems unlikely that Nintendo, the originator of massmarket gaming, would not be poised to seize some of the action.

Advanced software

Nintendo recently announced its first Game Boy Advance software release, *Magical Vacation*, which it has tagged a




Recent claims have estimated GBA's power at somewhere between the SNES (*Yoshi's Island*, left) and N64 (*Yoshi's Story*, right), although some coders have expressed disappointment with the unit. What is surprising is the extensive hardware allowance Nintendo has made for handling FMV footage

'communication RPG'. The company states that, 'While *Pokémon* broke new ground by encouraging RPG users to trade with and battle each other, *Magical Vacation* will facilitate the communication aspect further'.

The game is being developed by a new, Nintendo-backed venture, Brownie Brown, led by four former SquareSoft employees who, legend has it, created the seminal *Secret of Mana* (see p150). A detailed, fascinating world such as *Mana* featured, blown up to massively multiplayer scale, is a prospect to whet any gamer's appetite.

As for whether Game Boy Advance has the potential to equal its forebear's success, one leading developer is unsure: "They've sold 100 million of the old Game Boy, which is astounding. Whether they'll sell 100 million of this new Game Boy, I doubt, because I guess the kind of people that the Game Boy market satisfies are still satisfied with that really crude, old Game Boy. Battery life and ease of use have been the most important thing for the pocket market, because that is the general gaming market – it's casual gamers, not enthusiasts. It's the real people out there.

"In terms of 2D abilities, the Advance is probably a little bit less powerful than a SNES. In terms of 3D, it's probably like a SNES with a SuperFX chip, so it's got crude but fair abilities"

I think that there will probably be better things along that will do the next big thing, whatever people need in a pocket machine. Maybe networking is that next big thing."

SpaceWorld will surely throw up some indicators.



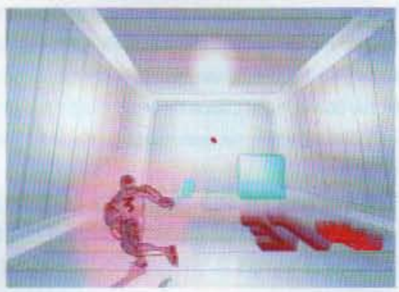
No, the final unit will not look like this, although it has been confirmed that, unlike previous models of the Game Boy, GBA will be operated in a horizontal manner, much like the Lynx or Game Gear. Shoulder buttons will feature

COIN-OP TITANS UNVEIL NEW **ARCADE STRATEGIES**

Sega and Namco prepare for Japan's annual JAMMA coin-op showcase with private presentations













Sega's *Tokyo Bus Guide* (above right) uses the *18 Wheeler* cabinet. Industry insiders have noted both Sega and Namco's more conservative, cost-effective approach to the arcades

Just two months before the JAMMA show in Tokyo, Sega and Namco have revealed their latest round of arcade creations. With the advent of coin-op-standard graphics in home machines, the Japanese arcade market has become increasingly hard to crack, and the two giants have adopted markedly different strategies for tackling the current instability.

Sega shows its hand

On June 23 , Sega showcased its latest series of eye-catching and vibrant arcade designs in keeping with current thinking, suggesting that elaboration is the true key to the Japanese gamer's pocket. The event also saw the first fruits of Sega's recently renamed AM R&D units.

Sega Rosso (formerly AM R&D#5) is responsible for the abstract puzzler *Cosmic Smash*. Inspired by 'Tron' and borrowing heavily from the classic coin-op *Arkanoid*, the simplicity of a two-button interface and pulsating colours proved an immediate success with attendees. Sega Rosso is also responsible for the long-anticipated *Star Wars Racer*. The Model 4 title has been delayed due to display problems, but it is expected to be fixed and ready to roll in most Japanese arcades by now.

Giant Gram 2000, the sequel to the popular *Giant Gram* wrestling coin-op, was proudly demonstrated by Woohoo (AM R&D#1). Though Sega has voiced concerned over difficulties which have arisen over a break up of the Japanese professional wrestling federation – apparently key wrestlers are leaving to form their own association – the disruption should not affect the launch or massive popularity of the machine, scheduled for this summer.

The Amusement Vision (R&D AM#4) branch of Sega was also in attendance and it finally unveiled a playable version of the *Spikeout*-inspired *Slashout*, in networked form. The scrolling 3D beat 'em up may prove popular for a while, although moves from other developers to bring similar titles, such as Square's *The Bouncer*, to the next-gen scene may reduce its impact. Exciting rumours were also circulating that



Sega Rosso's *Cosmic Smash* instantly appealed with its recognisable gameplay and vibrant graphics

the division was working on a *Space Harrier*-styled shooter.

Although Hit Maker (AM R&D#3) failed to roll out any of its anticipated technology, representatives disclosed the titles which will be ready for JAMMA on September 3: *Crakin' DJ* will, unsurprisingly, be a BeMani-style rhythm-action game, while *Confidential Mission* sounds more intriguing, combining elements of both *Virtua Cop* and Rare's *GoldenEye*.

The resourceful Sega also used the event to launch *Tokyo Bus Guide*, which, as the name suggests, offers players the opportunity to shuttle passengers around the city's busy streets during rush hour. The game was developed by a thirdparty company called 45, and is a direct port of the Dreamcast title. Its cabinet is exactly the same as the unit produced for *18 Wheeler*, provoking speculation that Sega may be employing strategies to improve cost efficiency.

Namco on cost-cutting drive

By contrast Namco's private show in Kawasaki on June 13 showed a reversal in attitude to coin-op manufacture and marketing. After posting a disastrous 95 per cent fall in revenues for last year, Namco, once considered indestructible in the arcade marketplace, is now clearly taking a more cautious approach.

Eyebrows were first raised when *Mr. Driller 2* was unveiled. Though the game provided an interesting twoplayer mode in which your opponent's screen can be turned upside down, it was noticeable that a drop in graphical flair was evident. Namco has replaced the System 11 board of the original *Mr. Driller* with the new, cruder and cheaper System 10. The hardware uses strictly no-frills PlayStation hardware (minus CD drive, naturally), producing predictably rough-looking results. Word at the show suggested that Namco is keen to use the hardware in many more upcoming coin-op projects.

World Kicks had also undergone something of a transformation from its original guise. The elaborate deluxe model, complete with kickable 'footballs', has been a disappointing failure in the arcades. The new iteration on show loses some of the charm, though much of the expense, by merely using a ball-shaped button on the cabinet.

One notable exception to the less-is-more rule was a curious karting game, displayed in both standard and deluxe form. Although the driving game uses the System 10 board, the deluxe version is particularly interesting – sporting a real kart which moves laterally when manoeuvring around the tight corners in the game.

Though the technology is a clear throwback to the PlayStation era, Namco has nevertheless met the challenge by producing a selection of games focusing on quirky innovation rather than flashy graphics and enormous cabinets. Causing a big stir among many attendees was a pseudo-sequel to *Galaga*, employing a handheld gun to fire 'medals' at invading aliens; the medals turn into digital missiles on-screen when they reach their destination.

Such a title will clearly not make it to the UK, but its appearance at the show, along with the super-affordable System 10 titles, brought smiles to the faces of the many Japanese arcade centre operators in attendance.



Namco's *Kart Duel* (top) was the most outstanding arcade deign at its rather toned down show. Though the kart can move laterally it still uses the crude System 10 board

DIRECTX 8 LEADS THE WAY TO X-BOX

Microsoft's latest API reveals the thinking behind its next-gen console



Edge attended a number of sessions with developers and will report more next month



While there was little fresh information on the X-Box to be had, developers' attention was drawn to the fact that the Microsoft and NVidia presentations stressed new graphical techniques

Following on from last year's Meltdown event, on June 26-27 Microsoft's repackaged Windows Games Developer Conference was keenly attended by the UK PC developers, all hungry for news of X-Box.

Specifically arranged to brief them on DirectX 8, the latest iteration of DirectX, which will power Microsoft's console, much of the conference focused on the new feature set of the API's graphics component. The first day's programming stream covering next-generation issues, such as the programmable graphics pipe, use of higher-order surfaces and multisample rendering, was particularly well attended by developers such as Lost Toys, Mucky Foot, Core Design and Rage. Everyone seemed to agree that the needs of scaleable development is making the use of higher-order surfaces and level of detail dynamic tessellation a necessity.

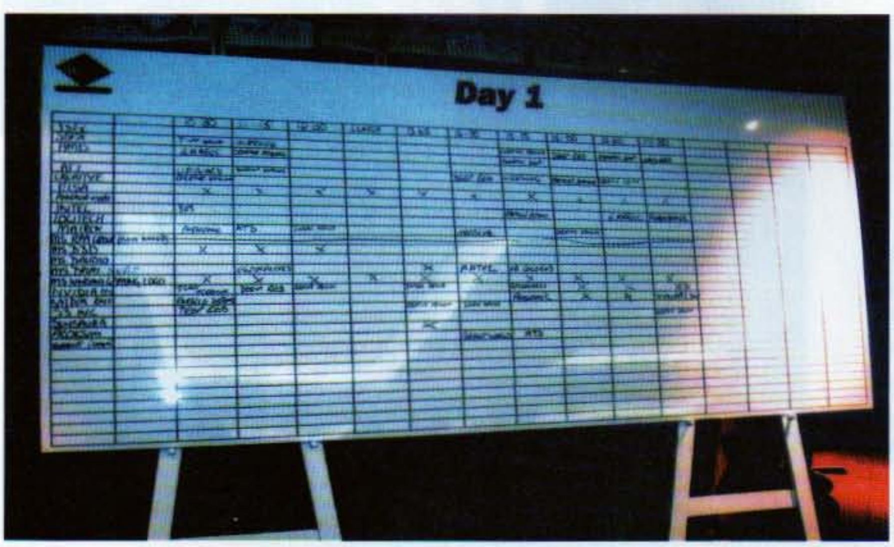
Other additions to DirectX include some interesting features for DirectPlay's networking code. Designed to make massive multiplayer games easier to support, DirectPlay includes improved firewall support, better lobby services and integrated voiceover IP. DirectAudio is also beefed up, and there were unconfirmed reports that X-Box will be using a powerful Yamaha sound chip.

NVidia and Microsoft share focus

As the provider of the graphics chip for X-Box, NVidia's unveiling of its particular preferred solution for higher order surfaces was another highlight for coders looking for clues about its forthcoming elements. Like Microsoft, NVidia spoke at length about new graphical techniques such as vertex and pixel shading. And while hard information about X-Box wasn't forthcoming, there were plenty of people reading between the lines. 'Look at the feature set on the Geforce 2 card and expect more of the same', seemed to be the message from NVidia. Several attendees that **Edge** spoke to were convinced that the PC-style architecture of X-Box will give a good balance of a well-supported feature set while still providing developers with coding flexibility.

The three big art package houses were on hand as well to talk about how their latest releases would ease the workload of art teams developing for next-gen consoles. Alias Wavefront highlighted the new feature set of *Maya 3.0*, Softimage talked about its *XSI* package, and Discrete ran a closed session on its forthcoming *3D Studio Max 4*, which is expected by the end of the year. Once again the talk was of improved support for subdivisional surfaces, streamlining the workflow and non-linear animation.

Other graphics hardware vendors were demonstrating or talking about new hardware. ATi's first hardware T&L set, the Radeon 256, looked impressive, while its head of research, Jason Mitchell, talked about the company's 'n patch' subdivision technique. Imagination Technologies also had its PowerVR 3 on test. The eight-way multi-texturing chip has been a long time coming, but Imagination promises it will have its first-generation hardware T&L card out early in 2001. Matrox, however, gave few pointers concerning its next card, other than it won't be called G500. But the G400's successor, which is expected by late summer, is likely to be following the hardware T&L route.



Day one of the Windows Games Developers conference focused on next-generation issues, such as the programmable graphics pipe, the use of higher order surfaces and multisample rendering

SONY PRESENTS HARD DISK **FOR PLAYSTATION2**

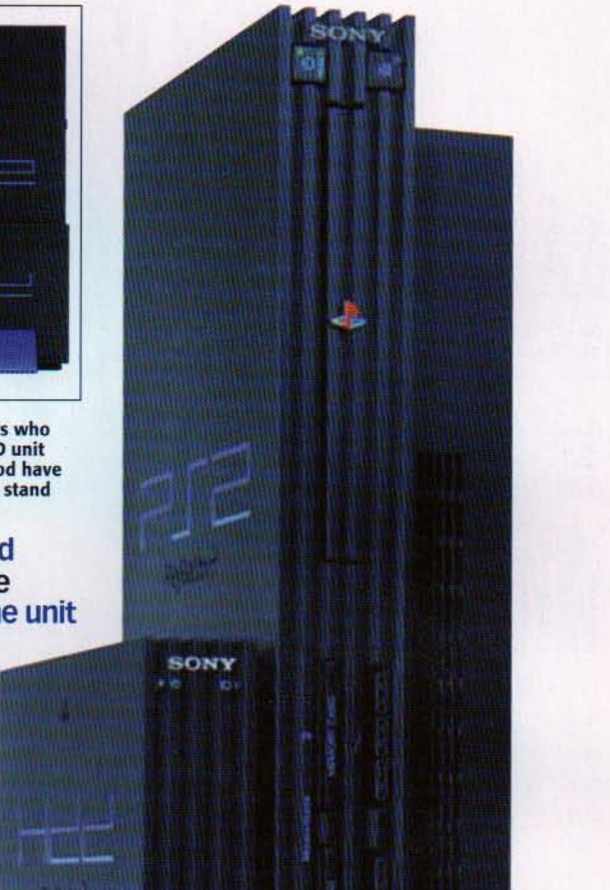
Japanese consumers to be given opportunity to buy large-capacity, neatly styled add-on from this winter

At the same time that it announced the rebranded PSone, Sony revealed a winter Japanese release for the PS2 Hard Disk Drive Unit (HDD). Consisting of a 'large capacity' hard disk and an Ethernet connection, the unit connects to the PS2 through its PC Card terminal interface. The hard disk resembles a miniature PS2 and exists in three different capacities. The Japanese unit is designed to sit alongside or on top of the console, though the European version of PS2 will incorporate a bay to house the unit.

Edge readers will recognise the advantages of the unit as cited by Sony. It is fast becoming modish for episodic content, downloadable levels, tracks, characters and the like to be mentioned in the same breath as broadband connectivity. But will the fact that the hard drive is not part of a unified architecture, as is the case with X-Box, deter developers from taking advantage of the feature? Not according to **Chris Deering**: "Talking two or three years out, I'm quite confident that there will be a sufficient installed base of PS2 to encourage development, and if the hard drive is in a significant portion of the machines, then people will write for that feature, just like they wrote for Dual Shock when that became available – or for steering wheel and gun peripherals and other peripherals as they've come along. And there will no doubt be additional peripherals coming along."



Import PS2 owners who wish to add a HDD unit will in all likelihood have to invest in a new stand



The hard disk resembles a miniature PS2 and is designed to sit alongside or on top of the console, though the European PS2 will incorporate a bay to house the unit

As for how the ethernet connection will be utilised in Europe, Deering argues that regional differences in the type and penetration of broadband delivery platforms make it difficult to draw general conclusions. "It may well be that some of the features in some countries are different to some of the features in other countries, depending on whether there's massive cable penetration – as there is as a percentage of homes in Germany and Switzerland – or some other method where there's much lower cable penetration," he says. "The engineering fundamentals come from Japan and then we will deal with how to make the most commercial sense out of it by country and by region as the news unfolds."

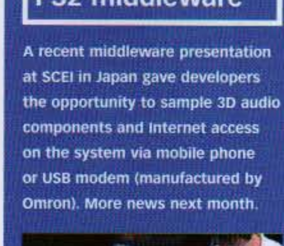
The actual capacity of the hard drives has yet to be confirmed. "It will be big," states Deering. "I am aware of a range of potential sizes, but it appears that the hard drive capacity versus cost is moving along in a similar trajectory to that of memory computing power, so it could be that over time even bigger hard drives might come along. I think the first ones will be quite ample."

He also wished to reassure gamers about the cost of the unit. "We'll do our best to make it as affordable as it can be. Right now the euro is not in fantastic shape relative to the basis on which some of the components are costed, but I think that there's a somewhat positive outlook for the euro, and we'll make it as affordable as we possibly can. That's in everybody's interest including our own."

Japan ramps up PS2 middleware

A recent middleware presentation at SCEI in Japan gave developers the opportunity to sample 3D audio components and Internet access on the system via mobile phone or USB modem (manufactured by Omron). More news next month.









PRESCREEN

EDGE PREMIERES INTERACTIVE ENTERTAINMENT'S FRESHEST FACES

The marketing name game

Making a virtue out of the virtual

The Sydney Olympic Games are just around the corner, and fittingly this month's crop of Alphas sees a sports game eager to cash in on the media interest surrounding the event. Sega's *Virtua Athlete 2K* boasts realistic animation with bursts of addictive gameplay. Indeed, given the Dreamcast's potent poly-pushing capacity, the fluidity and authenticity with which the athletes put their shots and leap hurdles should surpass that of any other similar title which has come before. Hence the 'virtua'.

But hang on. 'Virtua' is meaningless. You naturally associate the word with a game which aims to reproduce real-world physics, but it can't be found in any dictionary. Just where did this term originate and what does it signify? The implication is that this kind of game is so lifelike, so realistic, and so accurate in its replication of the rules which govern our physical universe that the old '80s term 'virtual' simply won't do. The latter term will be forever associated with the virtual reality 'revolution', shaded vector graphics and chaps sporting over-designed helmets.

No, 'virtua'-monikered games are a different breed altogether. After the impressive debut of *Virtua Fighter* in 1994 the term was forever linked with a new era. 'Virtua' games eschew the wireframes of the 16bit generation and replace them with ever-increasing numbers of filled polys. The 'l' was dropped and replaced with a dose of kudos. Nowadays, no publisher would touch a game sporting the word virtual in its title.

Such considerations throw up interesting propositions. Titles using the suffix '3D' are already becoming a rarer breed. When *Super Mario 64* signalled the arrival of, literally, a new perspective, everybody was keen to generate the belief that their games were just as well designed and playable. Did *Gex 3D*, *Prince of Persia 3D* and *Pitfall 3D* sell more copies due to their association with a superior game? Perhaps. Nintendo's classic didn't have to shout about its most revolutionary quality by advertising it in the title. In the wake of average platformers with linear designs and limp camera angles, consumers have begun to relate the '3D' suffix not with *Mario* but with poorly conceived gameworlds and naff marketing.

It has been some time now since **Edge** reviewed a game which actively promoted either the term virtual or 3D. Who knows, there may even come a day when the word '*FIFA*' fails to shift units. You can but hope.





Sega came up with its respected moniker concept with *Virtua Fighter* (left), and is still using it today with *Virtua Athlete 2K* (centre). *Gex 3D* (right) simply sought to benefit by association

Edge's most wanted

Identifying the hottest incoming blips



Cosmic Smash

(Coin-op) Sega

Simplistic it may be, but *Cosmic Smash* is just one more illustration of Sega breaking rules and flying in the face of convention. It might just work.



Zone of the Enders

(PS2) Konami

While not as visually arresting as the developer's *other* PS2 game, this is nevertheless a polished title **Edge** hopes will deliver plenty.



Kart Duel

(Coin-op) Namco

Climbing into the deluxe cabinet version (shown) and being thrown around while trying to overtake the competition is just too tempting a proposition.



Virtua Athlete 2K

(DC) Sega

Carrying on where Sega's *Decathlete* series left off, this promises to offer fourplayer action only rivalled by office favourite *International Track & Field*.

Index











PRESCREEN ALPHAS

ARGONAUT'S X-BOX GAME OPENS THIS MONTH'S SELECTION AS NEW TITLES FROM SEGA SHOW MUCH PROMISE

MALICE

FORMAT: **X-BOX** DEVELOPER: **ARGONAUT**











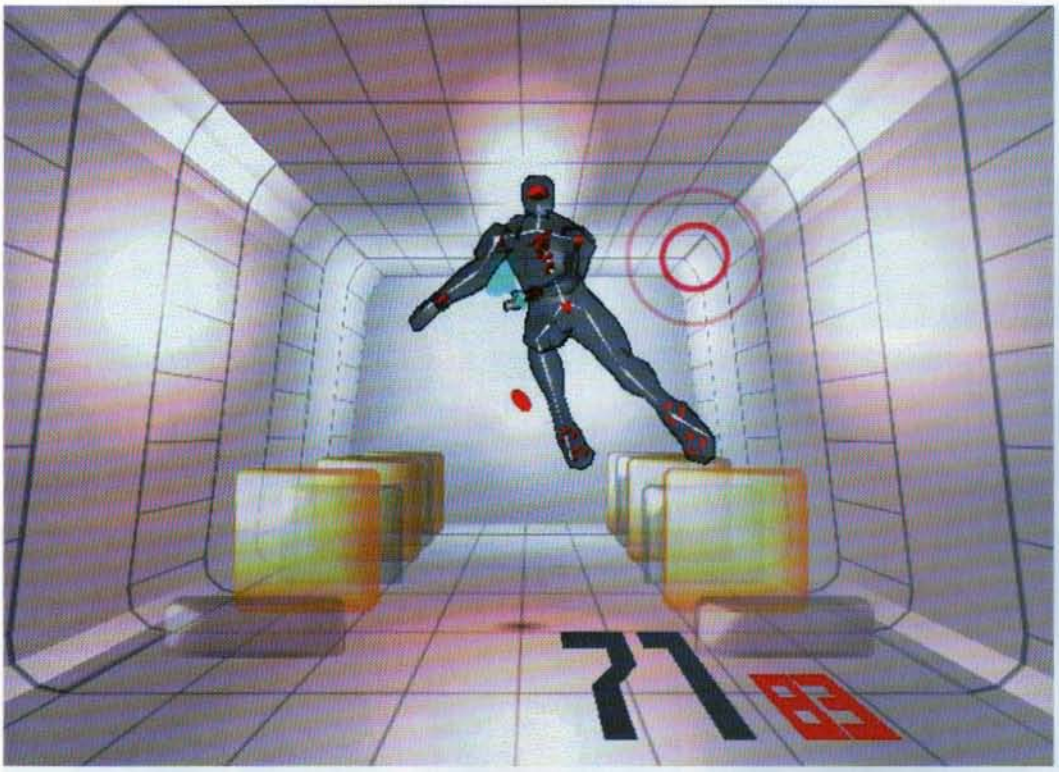


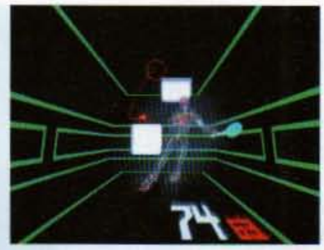


These are world-exclusive shots from Argonaut's X-Box game, codenamed *Malice*. The thirdperson adventure makes use of the developer's new graphics engine, dubbed ShadowCaster due to its ability to handle up to eight independent, realtime lights. Demonstrated on a P1000 armed with nVidia's GeForce 2 card (Argonaut's Jez San claims the card pales next to X-Box's specs), *Malice* impresses. Characters cast shadows on themselves, the landscape and each other, while bump-mapping adds visual depth to the detailed textures. San is reluctant to reveal much of the game's plot, other than that it features a female character who morphs into a child and then various animals as play progresses. The mono shots here were specifically prepared to show off bump-mapping effects.

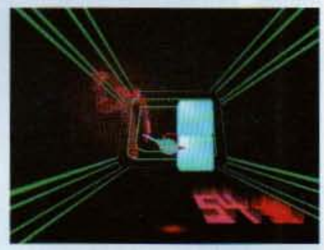
COSMIC SMASH

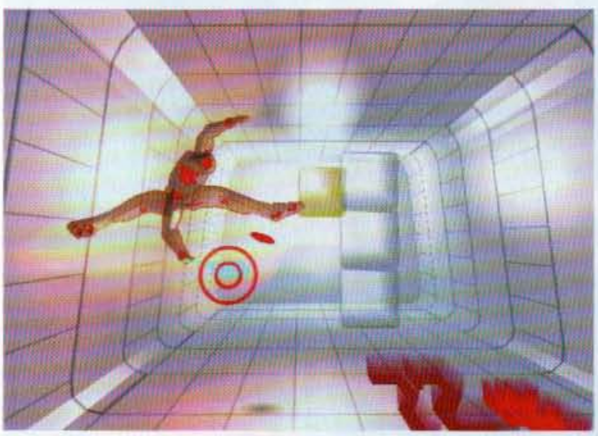
FORMAT: **COIN-OP** DEVELOPER: **SEGA ROSSO**

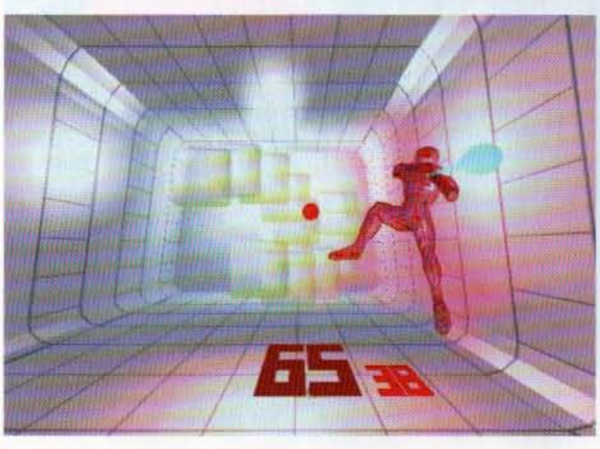


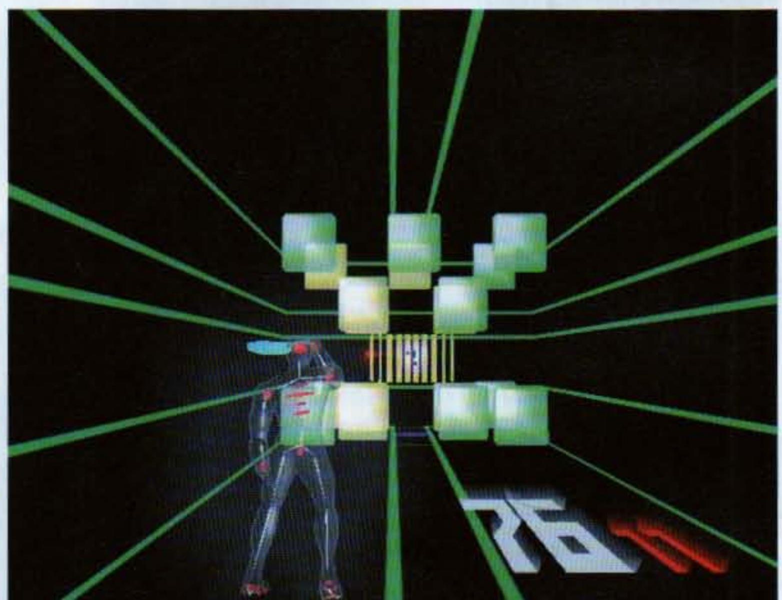












Inspired by Disney's 1982 special-effects-fest 'Tron', *Cosmic Smash* mixes *Arkanoid* with squash. Once placed in a closed room, your task is to destroy blocks by hitting them with a ball launched by your racket. A variety of obstacles exist – some of them move while others are not easily destroyed. As any of the surfaces can be used to rebound the ball, it's up to you to decide how to dispose of all of the blocks before the time limit runs out. Control is limited to a jump and a smash button, with special moves achieved through simultaneous use of the pair, though a time penalty ensures this feature isn't abused. Though simplistic, the visual style complements the action commendably and is another example of Sega's continued commitment to injecting new ideas into a coin-op market desperately in need of invigoration.

SLASHOUT

FORMAT: **COIN-OP** DEVELOPER: **SEGA SOFT 4**













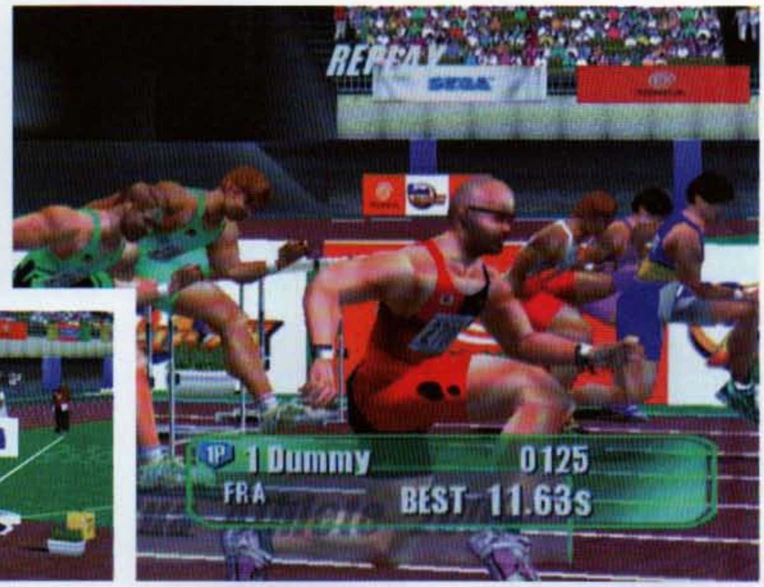
This sequel to *Spikeout* is a scrolling 3D beat 'em up in the same vein as the original, though with the action transplanted to a fantastical setting. No more fighting with bare hands or an iron bar, as each of four characters available are equipped with a blade to hack their way through eight stages populated with some 40 types of assailant – of which four can appear onscreen at any one time. Multiple paths add replay value, and a variety of items provide character upgrades, including access to magic, which becomes more important as the game progresses and the bosses become harder to fell.

VIRTUA ATHLETE 2K

FORMAT: **DC** DEVELOPER: **AMUSEMENT VISION**



Although Eidos has snapped up the official licence to the Sydney Games, Sega's *Virtua Athlete* is set to be released in time to cash in on the hype surrounding the 27th Olympiad. Motion-captured athletes will participate in seven disciplines: 100m sprint, 110m hurdles, 1,500m, long jump, high jump, shot put and javelin. While the controls are unlikely to deviate too far from the norm in the track and field genre, and fourplayer support is standard, scores can be posted on the Internet to obtain a worldwide ranking, and ghosts can be downloaded to compete with offline. The characteristics of athletes can also be tweaked by the player, intriguingly, by selecting three sports from a range of 90 in which they have trained.







ULTIMATE FIGHTING CHAMPIONSHIP

FORMAT: **DC** DEVELOPER: **CRAVE ENTERTAINMENT**

For a game based on such a fundamentally dodgy 'sport' (it is banned from all but a handful of states in America), *UFC* is a massively ambitious fighting game, promising a total of 3,000 moves and 1,200 combos from 34 different styles of combat – all of which purportedly used in the real thing. From sampling early code it's clear the developer is taking the task seriously: animation is fluid, fighter models are realistic, and the solidity felt when a successful blow is landed is unlike few other beat 'em ups. Control is vaguely *Tekken*-esque, with two buttons assigned to each side of the body (for left and right punches and kicks), and the variety of fighting displicines promises to deliver a massively varied game.









TRUCK KYOSOKYOKU

FORMAT: **COIN-OP** DEVELOPER: **NAMCO**

Roughly translated as *Crazy Truck Driver* (or *Truck Symphony*, if deciphered phonetically), this lorry racing title is one of two new Namco coin-ops using a standard PlayStation1 board instead of the usual PS-enhanced System 11 and 12 arcade boards the publisher has used in the past (for the *Tekken* series, for instance). The PS roots are evident in the visuals, though as with *Kart Duel* (another PS-powered coin-op, see p10), they serve their purpose surprisingly well. As with Sega's *18 Wheeler*, the cabinet features an oversized steering wheel that makes everyone look a bit daft, though most will be too engrossed to care. Despite the screenshot, **Edge** can assure you that running over cats is not the game's main objective.



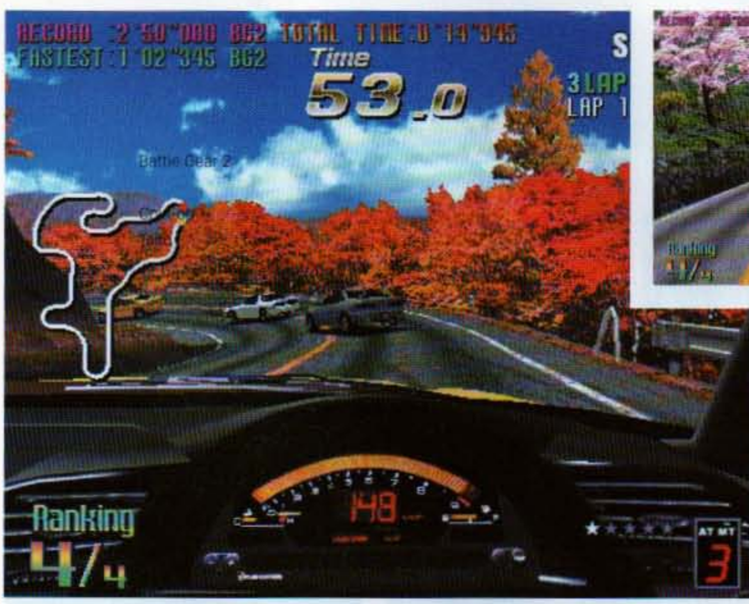






BATTLE GEAR 2

FORMAT: **COIN-OP** DEVELOPER: **TAITO**









After relative success with the first instalment released some 17 months ago, Taito returns with an improved sequel. The principle of GT-class racing remains, with 29 cars from six manufacturers (divided into three power classes) hurtling through seven tracks depicting typical Japanese landscapes. Control, though simple, is addictive and fun. A one and twoplayer cabinet version is offered, while link options allow fourplayer action, but the antisocial will be happy to learn the game includes a Time Attack mode for solo play. Should you post a fastest lap a password appears which you can post on Taito's Web site.

TOCA WORLD TOURING CARS

FORMAT: **PS** DEVELOPER: **CODEMASTERS**

Due out on August 25, the game Codemasters believes to be the greatest racer ever written for PlayStation1 should be finished by the time you read this. While **Edge** obviously cannot currently confirm the developer's bold claim, the preview builds that have arrived in the office over the last few months have at least been massively promising. Handling may be a little too twitchy for some (certainly when viewing the action from the 'chase cam') but it's more a matter of getting used to it than anything else. Car and track selection is extensive and the various racing options – spread across five continents – easily make this the *TOCA* series' most complete package yet. Expect an **Edge** review soon.









SHUTOKOU HIGHWAY BATTLE 2

FORMAT: **DC** DEVELOPER: **GENKI**

Arriving a whisker too late to be included in this month's testscreens, the sequel to Genki's massively disappointing racing venture appears to have undergone a major service. Handling – one of the original's fundamental flaws – is now more responsive, with cars gripping the asphalt far more convincingly. And, of course, the visuals have been massively improved, with even better use of lighting than its predecessor, while maintaining its fluid frame rate. Track length, another criticism of *Shutokou 1*, is also boosted (to a healthy 150km). However, a twoplayer mode is nowhere to be seen. Review next month.









DRIVER 2

FORMAT: **PLAYSTATION** DEVELOPER: **REFLECTIONS**

When **Edge** visited Reflections' studios, the most innovative feature of *Driver 2* was still at the drawing-board stage. The ability to exit your vehicle and enter other cars, flick switches or disarm bombs is still very much under construction. Just how much these elements will add to *Driver* remains to be seen, although it's likely that they'll simply boil down to simple event triggers. The driving element of the game plays magnificently, and other additions include a twoplayer splitscreen, curved roads and extra vehicles including fire engines and a school bus.



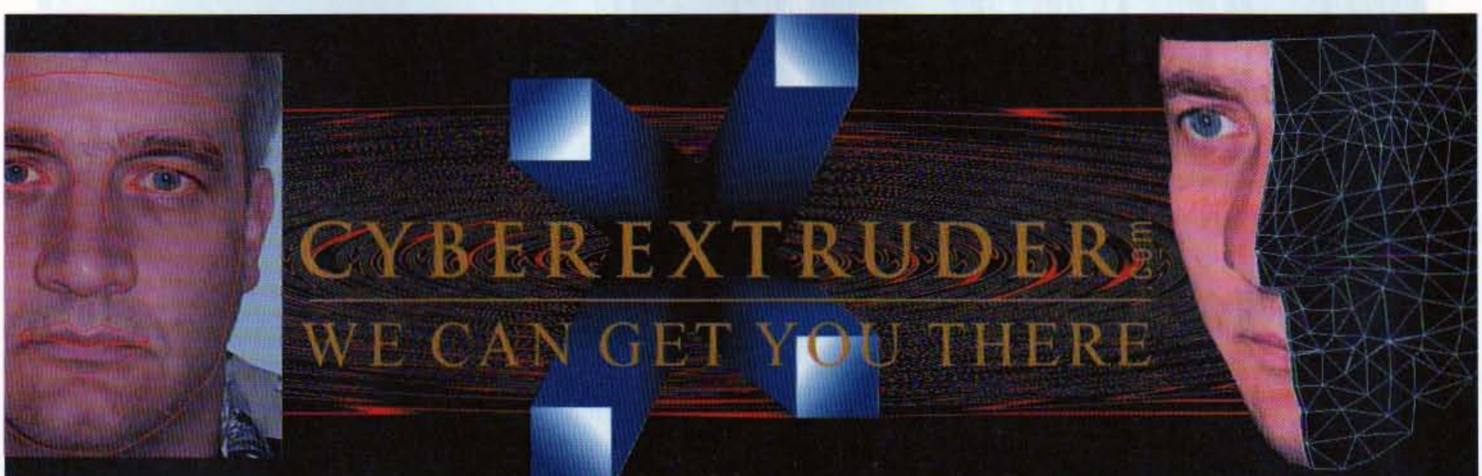








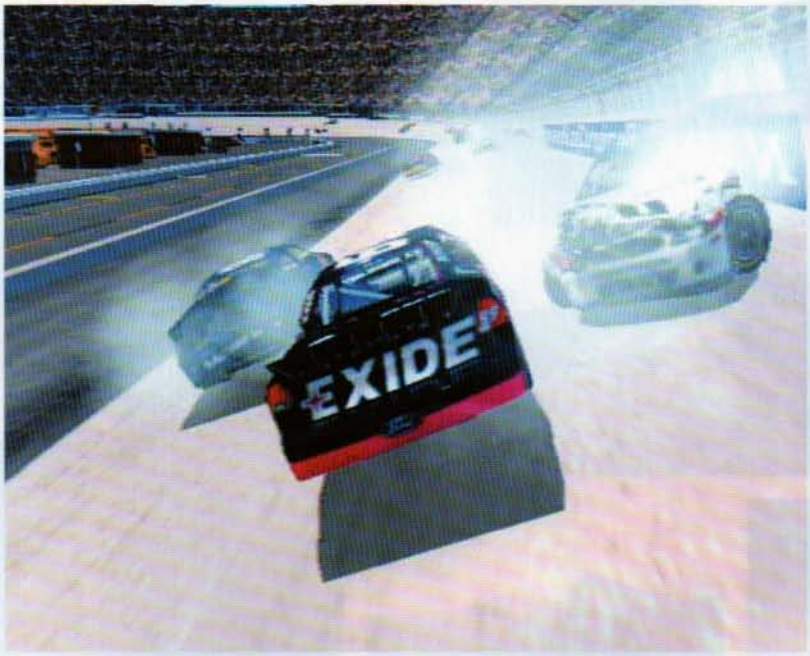




NASCAR 2001

FORMAT: **PS2** DEVELOPER: **EA**

No one will suffer heart seizure from the realisation that previous NASCAR instalments on a variety of consoles have always been held back by technical limitations more than any other problem. True, dynamics have been questionable at best, though you could argue that to also be hardware related. On PlayStation2, however, developers have none of the above excuses. With this in mind, EA is attempting to create the most exciting representation of this explosive race series to date. Improved visuals, better AI (each car has a routine based on one of the 33 licensed drivers), enhanced physics, extensive damage options and effects should provide you with all of the 'Days of Thunder' moments your cardiac muscle can take.



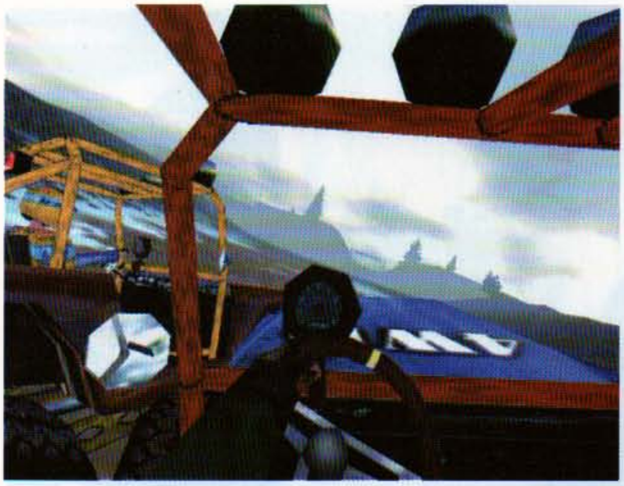






INSANE

FORMAT: **PC** DEVELOPER: **INVICTUS**



Designed specifically with online and LAN play in mind, this Codemasters-published racer promises to deliver frantic off-road competition as players choose a weapon from a selection of dynamically differing jeeps, trucks, or military vehicles. The open environments – which even feature wandering herds of buffalo – offer some bumpy rides as each driver picks a route of his/her choice, and range from the wintry feel of California's Yosemite Park to the searing heat of an African desert. Play modes include Capture the Flag and Soccer games as well as the Jamboree option – a race through a series of randomly placed gates where it's up to you to work out the quickest and safest way of getting from one to the next.

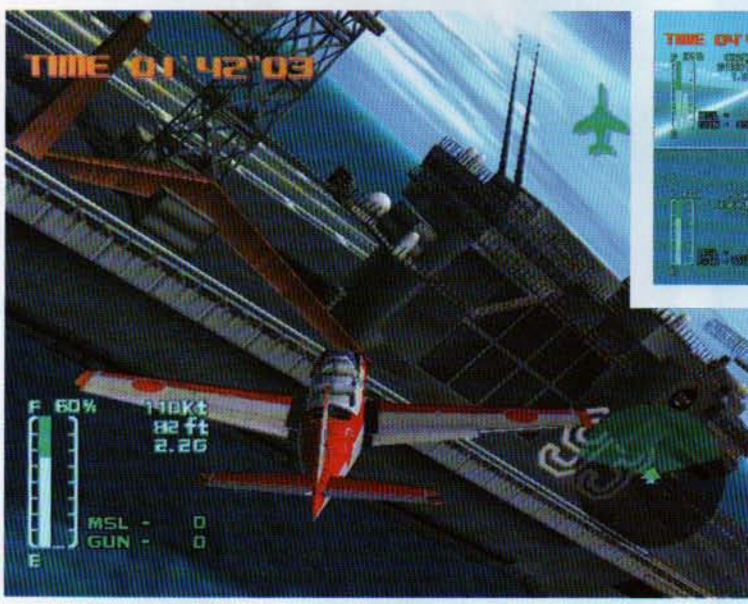






AEROWINGS 2

FORMAT: **DREAMCAST** DEVELOPER: **CRI**







One of the first Dreamcast titles to make it to market, the original *Aerowings* was praised for its detailed environments, but most gamers simply could not see the appeal in formation flying for points. 'Give us some things to shoot', they wailed. And that's exactly what developer CRI has done, throwing all manner of foe at players who must work their way up through the aeronautical food chain, from prop-driven crates to fully fledged jets. The game's extensive training mode, taking gamers through every essential flying discipline, proves not to be the chore it looks on paper but in fact strangely addictive.



THE MECHSMITH

FORMAT: **PS2** DEVELOPER: **DDS**

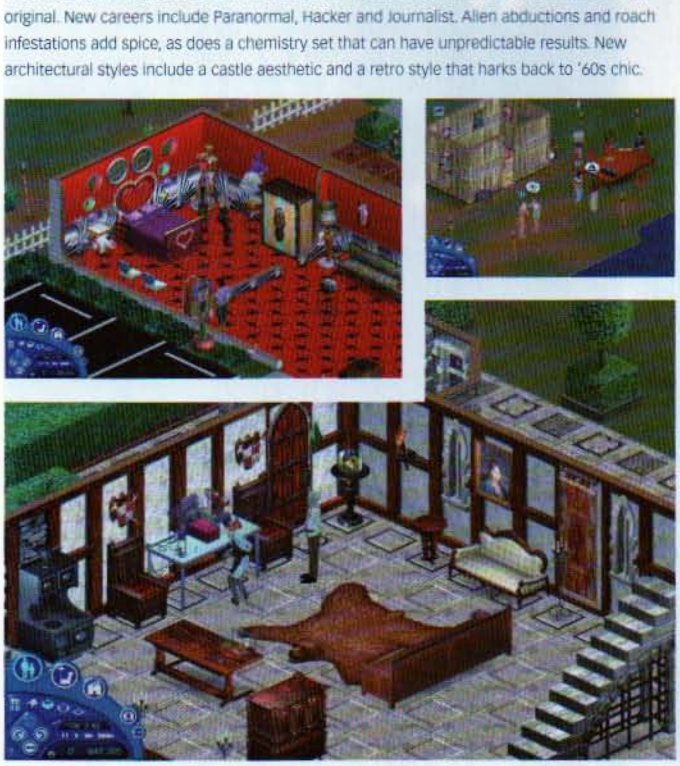
An action/simulation hybrid, *The Mechsmith* should offer an unusual degree of robot customisation, allowing you to design and fit new parts to your fighting machine. Every new design can be tested by undergoing training options and in-game battle sequences retain the 3D perspective while also enabling you to instruct your robot with basic commands.



THE SIMS: LIVIN' IT UP

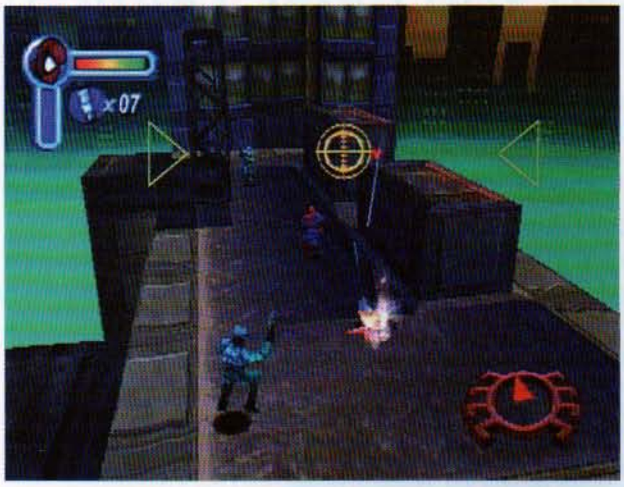
FORMAT: **PC** DEVELOPER: **MAXIS**

This official add-on provides new situations and objects to extend the quirky humour of the original. New careers include Paranormal, Hacker and Journalist. Alien abductions and roach infestations add spice, as does a chemistry set that can have unpredictable results. New architectural styles include a castle aesthetic and a retro style that harks back to '60s chic.



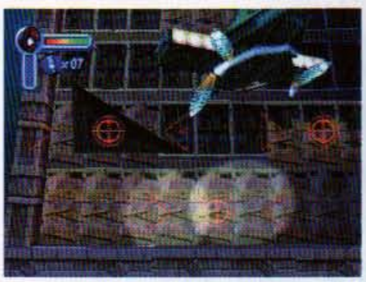
SPIDER-MAN

FORMAT: **PLAYSTATION** DEVELOPER: **NEVERSOFT**



Regular readers of **Edge** will be familiar with the progress that NeverSoft is making with its interpretation of the famous webslinger, but Marvel fans will also be pleased to know that Stan Lee will be voicing over the action. The developer has confirmed voice acting will be provided by the cast of '80s cartoon 'Spiderman and His Amazing Friends'. With the roster of bad guys nearer being finalised, it is looking unlikely that the Green Goblin and Dr Doom will make an appearance in the game, but this news should be tempered by the fact that the line-up includes Dr Octopus and remains strong.







DINO CRISIS 2

FORMAT: **PS** DEVELOPER: **CAPCOM**

Undeterred by the failure of the original to make the kind of impact many had expected, Capcom has decided to have another shot at the dinosaur extermination genre. Surprisingly, this instalment won't undergo a 128bit makeover, deciding instead to sink its claws firmly into PlayStation1. Reverting back to the prerendered landscapes of *Resident Evil*, the emphasis on combat has been enhanced and aggressive behaviour is rewarded with points. Some combo and counter elements also sneak in. Set on a military base, you can get your hands on a varied and powerful range of weaponry. A male character joins Regina and an underwater level is expected to make the final version, due in the autumn.



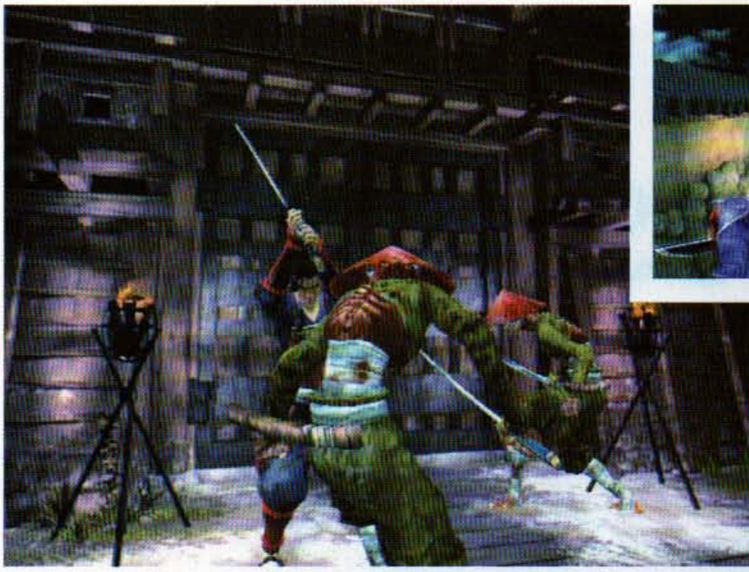






ONIMUSHA

FORMAT: **PS2** DEVELOPER: **CAPCOM**









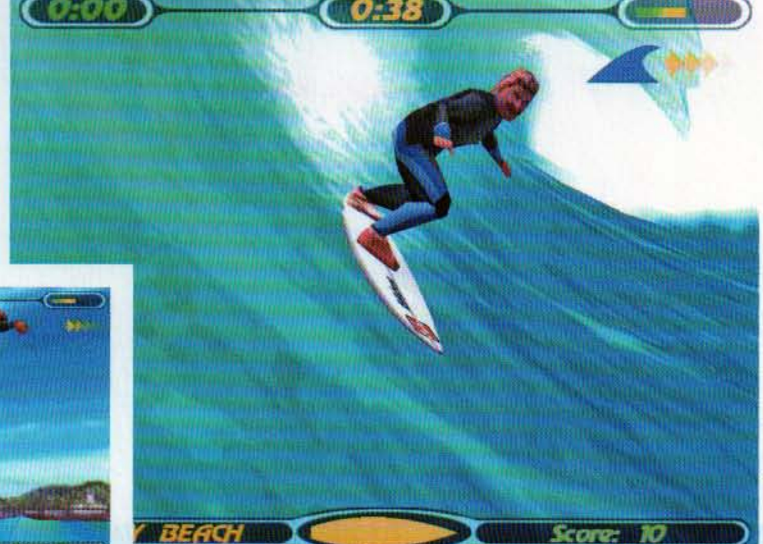
Originally a PS1 title, Capcom decided to port this project across to PS2. It then toyed with the idea of realtime 3D backgrounds before deciding to stick to a prerendered approach, relying on set camera angles to convey the dramatic elements usually associated with roving views. An impressive amount of detail has gone into making the backgrounds resemble medieval Japan. These are animated and offer some interaction (slash a rope to set a trap). Motion capture is used throughout, but characters still look at odds with the landscape. Collecting element stones unlocks special attacks and powers, and you sometimes have to help friendly samurai out of trouble. Expect further improvements before release.

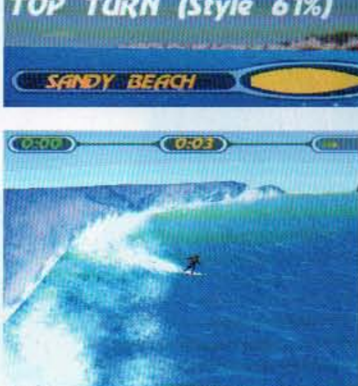
BILLABONG PRO SURFING

FORMAT: **DC/PS/PC** DEVELOPER: **KROME STUDIOS**



Australia-based Krome Studios is leading the inevitable charge of surfing games coming your way, with this licensed effort expected to ride in come September time. Control, the most fundamental aspect of all board-based games, is at this stage already intuitive, allowing complete novices to catch and ride waves in a reasonably competent manner. Mastering tricks (a three button and D-pad set up) is another matter, of course. Eight authentic riders of both sexes are included, complete with personal board and signature move. Different beaches offer a variety of waves, from beginner breaks to challenging ten-foot monsters. Various play modes should ensure digital surfers get enough longevity.







RED FACTION

Just when the firstperson shooter was looking tired, a game turns up with an engine overhaul which is genuinely exciting and may reinvigorate gameplay







The full range of weaponry to appear in the game has yet to be finalised, but the rocket launcher (above) looks certain to make the final cut



Enemy AI was impressive in the demo that Edge was shown, adding to the pseudo realism created by the interactive environments provided by the Geo-Mod engine

It isn't going too far to say that the firstperson shooter has become slightly moribund of late. *Daikatana* was a caricature of what can go wrong with game development, but it also bore the exaggerated traits of a stale genre. Ion Storm isn't the only developer guilty of over-reliance on a licensed engine, inadequate AI, loosely strung together narrative and inefficient level design. By resuscitating *Doom*, id Software is looking to past glories, and even the finer proponents of the genre – *Quake III Arena* and *Unreal Tournament* – have abandoned any pretence at maintaining a oneplayer game.

Red Faction is one of the latest attempts to enter the fray, but with a proprietary engine and a more balanced commitment to both oneplayer narrative and multiplayer modes the title may even manage to live up to the buzz it generated at E3. *Red Faction* started life as *Descent 4*, but after some months of work, developer Volition decided to create an entirely new game. Not only does the game possess de rigeur dynamic lighting, particle effects and location-based damage, but the Geo-Mod engine's main selling point is a truly interactive – and destructible – environment.

In contrast to the largely cosmetic effect of *Soldier of Fortune*'s gore zones – which were

Not only does the game possess **de rigeur dynamic lighting, particle effects and location-based damage**... but a truly interactive environment

Format: **PlayStation/PC/Mac**

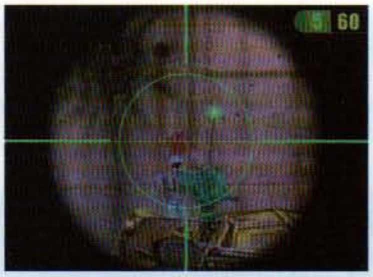
Publisher: **T•HQ**

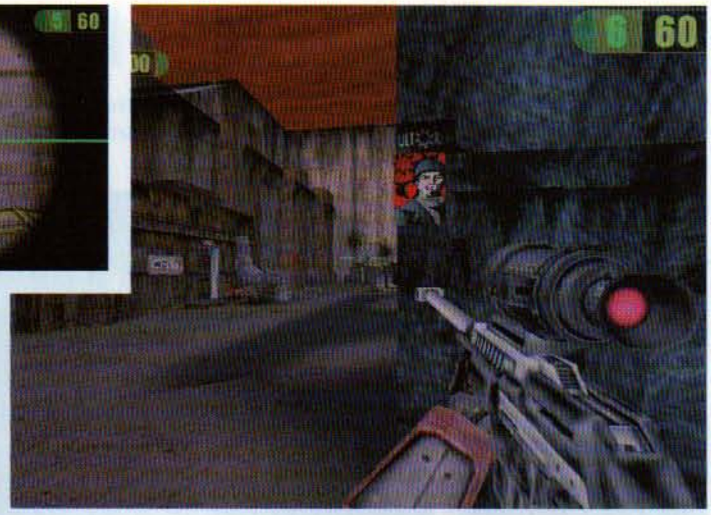
Developer: **Volition**

Release: **Q1 2001**

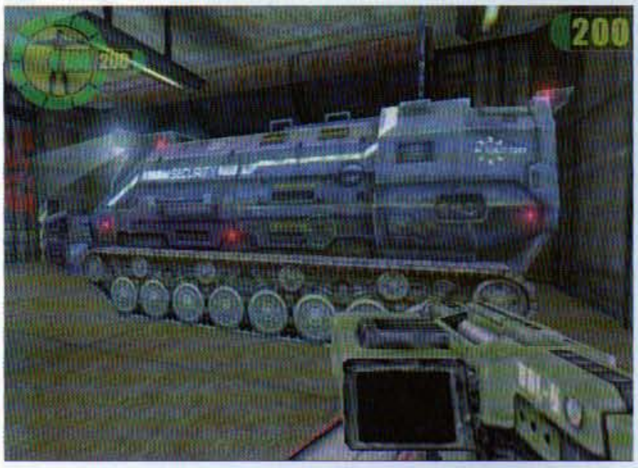
Origin: **US**







By taking out a gunner with a headshot players are free to use the superior firepower of the now-unoccupied gun emplacement against his opponents



This APC, equipped with both a chaingun and rocket launcher, is one of several vehicles that players can use to trash their surroundings

tacked onto the *Quake II* engine – the impact the Geo-Mod has on gameplay should prove substantial. Rocket launchers can be used to dig trenches for cover, or to tunnel through or under walls. Buildings such as watchtowers can be taken out by shooting away supports, and lava flows can be redirected to trap unwary pursuers. Remarkably, enemy AI looks set to enhance these effects, with adversaries seeking out cover and responding quickly to collapsing scenery.



Mars is depicted as a typically war-torn environment in *Red Faction*. When the walls begin to fall down this becomes more pronounced

This new dynamic should also give firstperson 'find switch' puzzles a welcome facelift.

The weaponry that players will use to destroy their surroundings appears to be more akin to the conventional arsenal of *Soldier of Fortune* than the outlandish variety seen in *Quake III*, including a sniper rifle and rocket launcher among others. Interestingly, the latter includes a thermograph, allowing users to find their target from behind walls, or even from under bridges and ledges. In another leap away from firstperson orthodoxy, eight to ten vehicles will be made available. A submarine is likely to appear, as well as an APC, which should have fascinating implications for multiplayer games.

Indeed, when the game is finished it should contain several multiplayer modes. Unfortunately, it is unlikely that PlayStation2 owners will benefit from network support despite recent news that thirdparty USB modems will be able to provide connectivity. Which may mean that PS2 fiends will also be denied the chance to tinker with the proprietary level editor. Nevertheless, solace should be taken in the fact that the oneplayer game looks equally captivating, with a well-developed – if somewhat clichéd – plot. The player adopts the role of Parker, an inexperienced miner based in a complex on Mars. In the midst of a workers' uprising against an oppressive regime, Parker is identified as a ringleader and must fight his way out.

Judging from the amount of positive feedback circulating at E3, it would appear that aficionados of firstperson shooters are keenly anticipating the advent of a more believably pliable environment. But it's the combination of such new concepts with the traditional multiplayer strengths of the genre and a *Half-Life*-style focus on the oneplayer experience that really whets the appetite.



The action is framed by cut-scenes of the mining colony at the heart of the plot. These are already looking as effective as you might expect

ALIEN FRONT ONLINE

Sega invites you to work as part of a four-strong team from home or the arcade and take the part of the recently arrived Triclops alien forces or the humans seeking to banish them









Although they are determined to wreak havoc on both coasts of the US, targeting New York and San Francisco, the Triclops soon head for Tokyo



Sega intends to enable gamers based at home or the arcade to work as part of teams of four, complete with voice links to plan attacks

Format: **Dreamcast/coin-op**

Publisher: **Sega**

Developer: **In-house**

Release: **TBC**

Origin: **Japan**

Seemingly convinced that the nations of the world could unite without quarrel against the common threat of extra-terrestrial invaders, Sega has devised a game based on that very premise. *Alien Front Online* takes place a mere 22 years from now, when, after landing their two-legged, technologically advanced mech units in Washington, the Triclops alien forces plan to leave the capital behind and cause bicoastal havoc in the US by descending on New York and San Francisco simultaneously. From there, a swift flight across the Pacific looks likely, with Tokyo representing the most obvious target. Understandably annoyed by this intrusion, the US deploys its finest Army and Marine armoured battalions.

Controlling these units couldn't be simpler: in the arcade version you have a wheel to steer with, there are two thumb buttons for strafing manoeuvres, a left and right foot pedal (reverse/forward, respectively), as well as main and sub-weapon trigger controls. In the home the DC joypad easily adapts all of these functions. Conveniently, alien mechs can also be manipulated in the same simple – and therefore intuitive – manner.

Not only can all of the scenery be destroyed, this is also necessary, as doing so reveals power-ups and health packs. So, you may have blasted a skyscraper using your tank's shell-fed cannon (or laser in the alien mech) and revealed one of two sub-weapons for your vehicle: powerful tow







In addition to the basic weapons (shell-fed cannon and mech laser), power-ups – including hovering homing missiles and the gravity ball, which tosses opponents high into the air before slamming them to earth – can be picked up through the game



Depending on the side you play – extra-terrestrial Triclops or the brave boys of the Army and Marine Core – different vehicles of war await you. The Tricops attack aboard mechs, humans opt for tanks, but both are straightforward to control







Not only can the scenery be destroyed, but advantage in the form of power-ups and health packs can be revealed by doing so

missiles (limited to dual or quad packs), or a grenade launcher. Alien ships also have access to secondary armament in the form of hovering homing missiles or the gravity ball, which immobilises an enemy before tossing it up in the air and slamming it back to earth. Finding and collecting these power-ups is an obvious advantage as the basic weapons, while perfectly functional, lack the bite the additional firepower can provide.

Simultaneous coin-op/home play follows a four-versus-four structure, with members of the same team being able to communicate with each other via cabinet-mounted microphones (in the arcade) or the microphone unit from *Seaman* (in the home) for fine-tuned strategic attacks on the opposition. The headsets provided for the Dreamcast game at E3 didn't appear to be working consistently yet. Scoring is simple: the team with the most kills wins.

Interestingly, with an arcade broadband arcade network currently being created in both the US and Japan, Sega would appear to be planning to use the Internet as a way of consolidating its troubled arcade sector with its home userbase, growing both sides of the business.

Whatever the business strategy, simple controls, decent visuals, and fast, frantic and addictive gameplay should guarantee *Alien Front Online* success, even if Europe's fewer arcades and current 33.6Kps modems make the prospect somewhat less enticing than on the other side of the Atlantic.

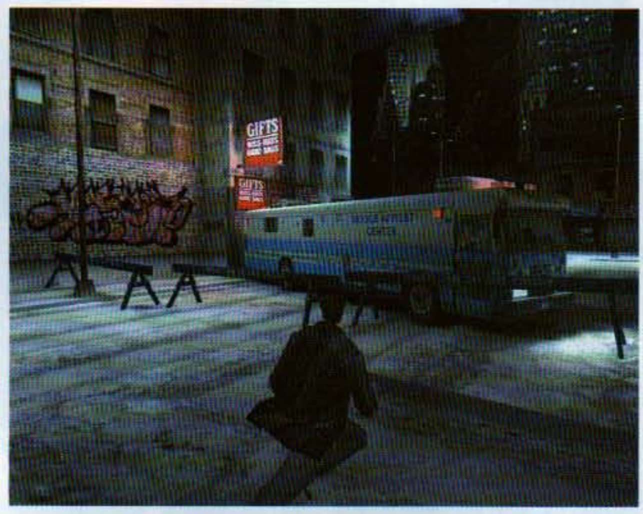
MAX PAYNE

Another videogame inspired by cinematic techniques enters the FPS arena. Will Remedy Entertainment's choreographed violence bring something special to the genre?





Current code provides some impressive sequences. Double press in a particular direction and Max will perform a John Woo-inspired manoeuvre



Much hysteria has surrounded the textures and animation provided by the MAX-FX software. The flapping trenchcoat is impressive





Ten main villainous bosses are out to thwart your progress. Dramatic death scenes can be assured

Format: **DC/PC/PS2**

Publisher: **Rockstar/Take 2**

Developer: **Remedy Entertainment**

Release: **Spring 2001**

Origin: **Finland**

Set in New York during one of the worst blizzards in history, *Max Payne* will attempt to combine the strength of a *Half-Life*-quality narrative with improvements to the usual FPS action genre. As the title suggests, *Max Payne* will not be a game to compromise on violence. In fact, Finnish developer Remedy Entertainment intends to use it as one of the game's major selling points. But, unlike Raven's hyper-realistic gorefest *Soldier of Fortune*, the gun heroics displayed in *Max Payne* are to be at least partly conveyed with a balletic artistry borrowed in no small way from 'The Matrix'.

The developer has been particularly keen to show off its own Max-FX technology, which has resulted in a number of impressive effects. Fire a gun in a given location and the camera will follow the bullet to its target. Enter a room full of Mafia henchmen and the game segues into slow motion, enabling the player to target his opponents as they reach for their weapons. Shells are ejected from the handgun in dramatic slow-mo while injured enemies writhe in pain. "Our technological approach gives the game a cinematic feel," reveals project leader **Petri Jarvilehto**. "However, we realise the engine is for nothing if the game does not push the envelope. We are going for action that will have the power and impact of a John Woo film."

How much these elements will add to the overall gameplay will be interesting to see, and while the plot – which has an undercover revenge motif – is hardly fresh, the code revealed so far has generated a good deal of anticipation. Fortunately, Remedy is to release versions of its MaxED level editor, ParticleFX editor and Actor FX technology with the game to allow a generous amount of game modification. Special effects, level editing, environment mapping and character generation will all be possible with this flexible system.

Max Payne and its beautification of killing will no doubt draw condemnation from some quarters, yet it may still be a step forward from multiple hit locations and the increasingly realistic representation of internal organs beloved of other FPS titles.



***Max Payne* includes three dominant acts each split into six large locations. Remedy admits that the plot is linear, so as to drive the strong narrative on**

SILENT SCOPE

Jet-piloting terrorists, semi-naked ladies and Tom & Jerry. But can Konami's inspired coin-op have the same impact in its peripheral-free home form?





While, with set pieces like the one above, the playability of *Silent Scope* isn't open to question, its longevity in the home could prove a problem



Focus on the semi-clad sunbathing beauties and you pick up a bonus life



Konami has already built a wide range of assignments into the game, but an all-new Original mode should extend these further

Format: **DC/PS2**

Publisher: **Konami**

Developer: **In-house**

Release: **November**

Origin: **Japan**

If you momentarily blank out the slightly worrying memory of the Yakuza type with 100 per cent head shot rate that **Edge** came across in one of Tokyo's arcades last year, and assuming you're not one of the socially maladjusted individuals with easy access to firearms that are currently dragging videogames into the headlines on the other side of the Atlantic, there is much to enjoy with lightgun titles. Longevity will always be an issue, yet the more accomplished examples of the genre, such as *Time Crisis* or *The House of the Dead 2*, manage to retain a high degree of replayability – something that the majority of their peers fail to match.

In its coin-op form *Silent Scope* was one of the titles that ranked up there with the lightgun classics, and was a phenomenal success as a result. Still, it shouldn't shock you to learn that the console versions of the game will not come with a full-sized sniper rifle attached, plastic or otherwise. Instead, you make do with your trusty joypad, and playability appears to have been only mildly hampered in the peripheral transition. The left shoulder button operates the sniper camera (which appears at the centre of the screen) while the right hand side takes care of the bullet delivery. It's a compromise that works remarkably well, though **Edge** has found the PS2 analogue controls overly twitchy – although you always have the option to tweak the sensitivity levels.

Also included in the game is an additional original option to complement its faithful arcade conversion. While details of the former remain unconfirmed, the latter offers three modes. Time Attack has you sniping through all of the game's arcade levels, the Shooting Range lets you test your aiming skills on the unpredictable nature of watermelon and cardboard targets, while the Story mode carves a route through the available levels. At certain points you get to select your next assignment, which can be anything from taking out a crazed pilot in charge of a Harrier Jump Jet or parachuting into a heavily guarded mansion under the relative cover of night, to skulking through Bond-esque secret warehouses (complete with appropriate submarine dock) and a poolside shoot-out involving a knife-wielding duo by the name of Tom and Jerry.

Even with the alternate routes built into the game, *Silent Scope*'s longevity is not necessarily assured, which is why **Edge** is keen to uncover what Konami has in store for the Original mode. Expect an update soon.









While the full-sized rifle is gone, the Dreamcast and PS2 analogue sticks manoeuvre the sights surprisingly well

GP3

The most anticipated F1 game of recent times is finally assembled and ready to make its racing debut. Edge takes a final look before the definitive test drive







The blinding spray effect from following another car in the rain is superbly conveyed (top left). Full damage is an option, of course (main)





Controlling 700-odd bhp on a wet track with all of the assists off requires sublime levels of wheel/pedal fluidity. Best of luck

Format: **PC**

Publisher: **Microprose**

Developer: **Geoff Crammond and co**

Release: **July 28**

Origin: **UK**

You may as well know that from this month **Edge** will only cover Formula One-based games if they offer something unusually interesting, some revolutionary aspect, or manage to be significant in any particular way. After all, the number of F1 titles to have emerged in the last 12 months as publishers fall over themselves to cash in on this oversubscribed and overexploited sub-genre is ludicrous, with most offering little or nothing over the previous instalment. This is something that has plagued football titles, and **Edge**'s approach to potential coverage is identical: bring something different to the party or be left standing at the door.

With its readily playable simulation approach, this isn't something *Grand Prix 3*'s developer should necessarily be worried about. The third instalment in Geoff Crammond's seminal series, it continues where the other two left off, improving every aspect of an already considerably standard-setting racing package.

The version **Edge** has played is considerably more advanced than the E3 build. While the dynamic weather has been better implemented (the developer felt the track looked too mirror-like when wet and has hence reduced the intensity of the effect), the main addition is force feedback support, which works superbly, simulating steering load, violent deceleration and sudden loss of traction with delicately balanced aplomb. The resulting F1 drive is unequalled in the virtual world, offering the level of playability that Crammond devotees have come to expect from a simulation bearing his name.

Yet from now on they won't have to wait years between instalments as Microprose, seemingly unconcerned with the congestion affecting F1 games, is looking to release annual updates. That aside, with (at the time of writing) 170,000 UK pre-orders already secured, the developer's extensive collaboration with F1 team Arrows appears to have paid off. To borrow the slogan of that team's sponsor, the future looks bright for Crammond and crew.





There is no pace car in *GP3* – the option would have required an extra set of dynamics and time constraints intruded

Infestation

It's based in a house, a very big house, in the county, but that hasn't stopped Frontier Developments turning out some startling space exploration games. **Edge** journeyed to the outer reaches of the galaxy aboard the latest title from the team now working on *Elite 4*







Format: **PC/PlayStation**

Publisher: **UbiSoft**

Developer: **Frontier Developments**

Release: **August**

Origin: **UK**



Apart from the odd croft and converted barn there are few buildings to be spotted across the flat landscape that surrounds the aptly named Frontier Developments headquarters, which is situated in a village just outside Cambridge. If someone was to be transported down to the front door of Saxon Farm they would be forgiven for thinking that **David Braben**'s crew of coders and artists – 17 in all – were on the edge of the habitable world.

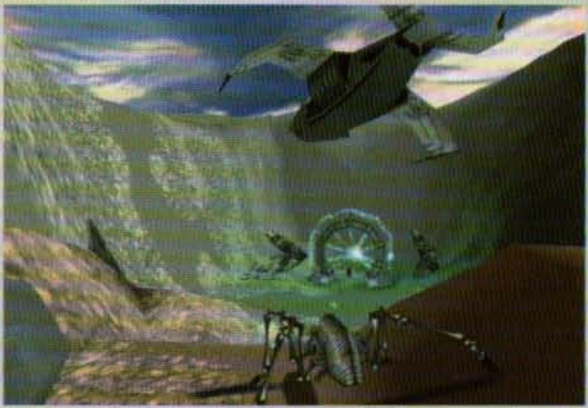
A lunchbreak in between interviews and a photo shoot underlines the idyllic, if somewhat parochial, location from which such futuristic titles as *V2000*, *Virus* and the revered *Elite* series emerged. We try the local pub, but it has stopped serving food – it is 1.45pm, and Tuesday, it appears, is a popular day for the locals (and, yes, a slight hush did descend as our group entered the lounge area). The only alternative is to try the nearby post office. Basic cheese and ham sandwiches are knocked up for us. It is cashier Doris' 30th wedding anniversary, and after a slight delay as a bouquet of flowers arrives and a regular asks for the delivery of a parcel to be cancelled, sustenance for the afternoon ahead is provided. Once outside, sandwich in hand, Braben smiles mischievously. "Have you seen 'The League of Gentlemen'?" he enquires. He clearly knows the territory well.



The contrast couldn't be more pronounced between this quiet locale and Frontier's preference for producing games which require the player to compete and negotiate through sprawling worlds populated by a multitude of alien creatures. *Infestation* is, in many ways, a close brother to the engaging *V2000*. Where the latter asked the player to

If someone was to be transported down to the front door of Saxon Farm, they could be forgiven for thinking David Braben's crew were on the edge of the habitable world

prevent and eventually destroy the source of a deadly virus spreading through peaceful territories, *Infestation* sees the human colonies attacked by a race of vicious aliens. Warp gate technology has facilitated this intergalactic expansion for the human race. However, the very technology which established the empire ironically provides the greatest threat for its downfall. The pernicious alien race (Braben decided to leave them nameless) swarms through the gates and puts an abrupt stop to your own plans to expand







The landscapes displayed on the PC version are stunning, and combine real-world terrain with more outlandish fauna and flora

your influence though the galaxy.

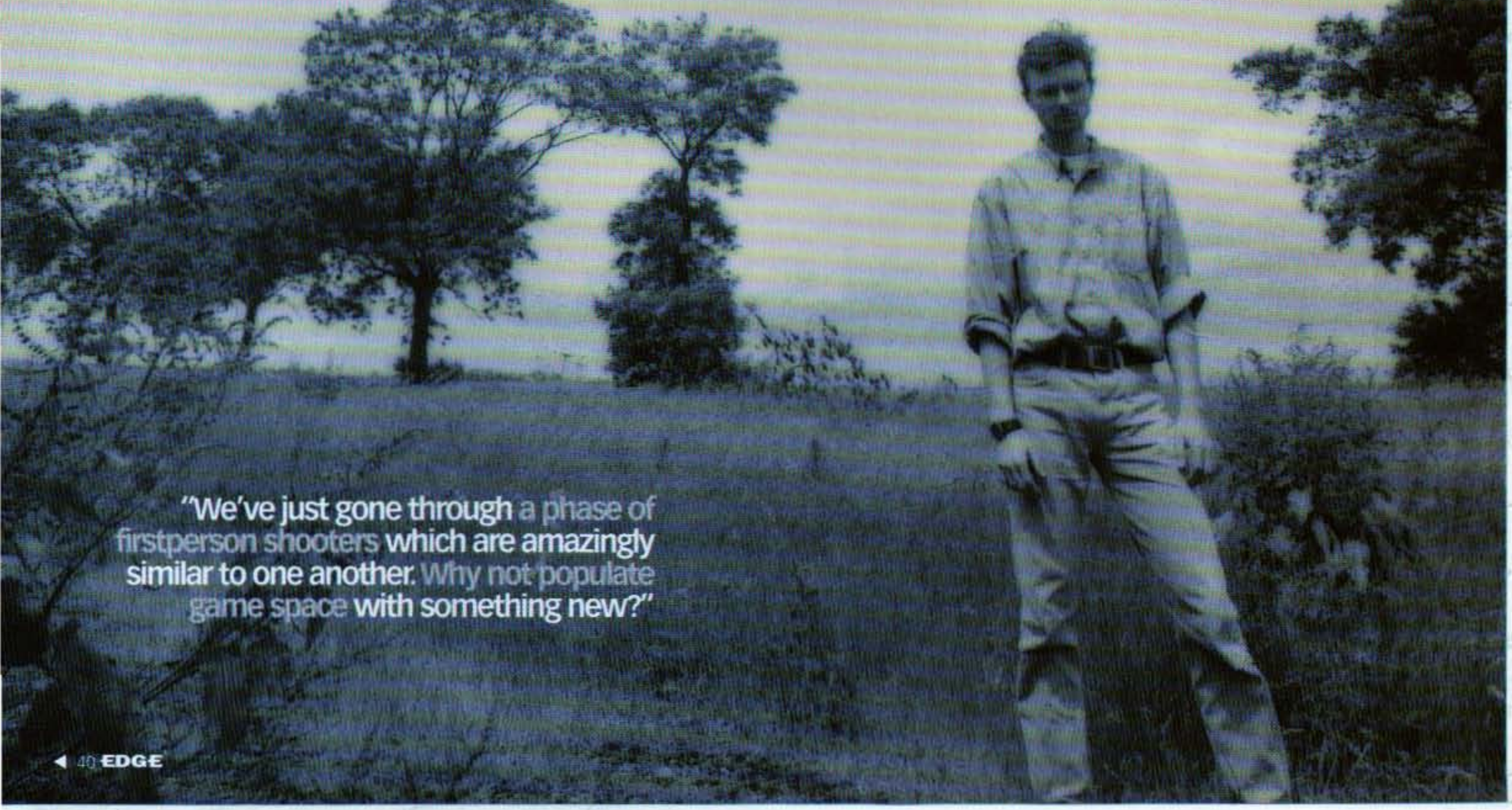
The plot may not be the most original, but, in Frontier's defence, the storyline merely acts as a backdrop to the action, which crosses many genres. "One of the problems the industry gets sucked into is these niches which are determined by publishing demands," laments Braben. "We've just gone through a phase of firstperson shooters which are amazingly similar to one another – a big shame. Why not populate game space with something new?" Accordingly, *Infestation* will not fit neatly into any given category. Ostensibly it is a thirdperson shooting action game with firstperson elements and leanings towards exploration. But there are also strong resource-management elements thrown into the mix to provide a strategic dimension to the action.

"There are three coloured crystals which can be collected – a certain percentage of each need to be used for a particular resource," explains **James Dixon**, *Infestation*'s project leader. What these do is to power up versatile ACAM vehicles, which can be used to overcome problems which confront the player. Five vehicle types will be available: standard four-wheelers, the 'Big Wheel', hovercraft, trucks and helicopters. It cannot be emphasised enough how much such adaptable craft add to the gameplay.

"With any game it's about being strict and rewarding the player at the right moments," continues Dixon, who is keen to emphasise the depth that such a component brings to the title. "Once you have the ability to mutate your vehicle you can alter it as much as you like for strategical purposes. If you are in a flying vehicle, you can reach otherwise inaccessible areas, whereas the Big Wheel machine will safely guide you across water hazards."

Such elements should see the title avoid the pitfalls that have dogged similar games, such as *Red Dog*. Argonaut's derivative title palled after lengthy play partly because of the repetitive action. Present code already communicates the sense of achievement provided by being able to constantly evolve your vehicle. The puzzles and challenges faced by the player have been incorporated equally as well. "Problems can be approached in a number of ways," says Dixon. "On one planet you must develop your technology to destroy an alien installation. One way may be to produce a limpet mine, place it on the side of a vehicle going into the base and watch it take out its own facility"

Discussing such cold-blooded strategies in Frontier Developments' boardroom, which is more like a country house kitchen, only serves to highlight the tranquil working environment. But the company is at pains to stress that its remote location doesn't lead to a



"We've just gone through a phase of firstperson shooters which are amazingly similar to one another. Why not populate game space with something new?"





The alien race has no name. Like other Frontier games, such as *V2000*, the enemy is identifiable by its looming presence and destructive powers

distancing from the market. "We do look at what other people are doing and would never cut ourselves off from other influences," Braben insists. "What irritates me more is when a developer gets something *nearly* right – and don't get me wrong, this happens to us too." Accordingly Frontier Developments has considered the differing markets for the PC and PlayStation. "More of the resource-management elements are automated for PlayStation," confirms Dixon. He maintains that the game will be more instant and immediate, though no less taxing for it.

The structure of the game has ensured that more than one planet at a time can be tackled. Cleverly, the warp gates can be activated by picking up friendly scientists (lightbulbs hover above their heads when a new technology has been thought up) and moving them to operate the star field. Apart from the training planet and the first level, each location will offer the player the chance to warp to several locations, preventing the usual linear monotony. All this ties in with location, so on a Mars-type planet there will be more red crystals than blue, on an icy planet more blue than green. So you have to plan where to pick up certain crystals to allow further exploration. As the game advances you will even be able to develop the technology to mine the crystals.

After taking time out to be interviewed, Braben shows **Edge** around the converted farm which has become his development home. The working environment is not as unconventional as you might expect. Apart from windows which look out onto large expanses of greenbelt and Braben's dog, Gem, which lurks tentatively under his table (not keen on journalists, apparently), the scene is much the same as any development room the world over. The atmosphere is cordial and there are clearly benefits to be had working in such quiet surrounds, but the Frontier team needs to expand to accommodate and tackle the challenges posed by PlayStation2. "We need talent to come out here," Braben says. "Response to recent adverts has been poor." Agency work is hardly **Edge**'s line, though the chance of working on Frontier Developments' most promising and anticipated title, *Elite 4*, would seem an exciting prospect for any coder.

The opportunity of meeting the whole team leads Frontier neatly onto the subject of the multiplayer aspects of *Infestation*. Admittedly, **Edge** expected the typical add-on to the oneplayer experience, but Braben has clearly put a lot of thought into the online dimension. "I think it's really important for the future. For me it's a whole new area that we have to concentrate on, and with *Infestation* we wanted it to be fun and balanced." The ability of the vehicles to mutate has clearly allowed for a range of multiplayer game styles. Eight are available, ranging from capture-the-flag arenas to football. The





Resource management will spice up the gameplay by requiring players to collect differing colours of crystals. Colours will depend on the planet type



■ James Dixon, project leader

■ David Braben, founder

■ Jonny Watts, lead artist

Photography: Martin Tompson

Merlin Animation

Frontier Developments has been putting in the hours to perfect a potentially revolutionary animation application. "We've spent a lot of time out of the limelight," acknowledges Braben. "Though what we can show you privately is a huge step ahead of anything coming out at the moment."

The Merlin Animation System breaks away from traditional motion-capture technology to bring a previously unimaginable fluidity and spontaneity to character movement. Screenshots can't do the program justice. The Dalmation dog featured below not only walks, sits and wags its tail with a dynamism which impressed **Edge**, but it also responds intuitively to its immediate surroundings. Manipulate the framework cues around the dog and it follows with an eerie accuracy. Eyes, mouth and ears can move independently and objects, such as a bouncing ball, can be 'perceived' and followed by the animal. Gradients and obstacles are also responded to in a more realistic manner, which will hopefully put an end to clumsy 'wall bouncing'.

Much has been made of Sony's Emotion Engine and how, if at all, this area can be tapped in the future. Braben sincerely believes that animation and facial kinematics are the way forward. A 'ghost' is the word he uses to describe characters walking through present game environments. Expect a future **Edge** feature exploring Merlin Animation and its potential influence on game development.





whoops of exultation and cries of despair while **Edge** competed in the football discipline were evidence enough of the game's enjoyment. Tackling, scoring low goals for one point and high goals for two were all joyously addictive. Team tactics even begin to emerge after the initial playground everyone-follow-the-ball mentality dies down, allowing co-operation to enter the equation. Up to 16 players can compete in the multiplayer arenas, and many attributes can be customised – such as the availability of power-ups and the points required for a win to suit your particular preference.

Braben will never be content with churning out derivative material from his codeshop. He looks to the future with a great deal of optimism. Would he give it all up? Perhaps leave coding for another career path? "I used to think that I would love to go into films," he confides. "But what is possible, and what we can do in games, is changing and the two are becoming ever closer." Off the record Braben enthuses about what is going into the next instalment of his space epic. Science fiction films and videogames meeting? Even the nuggets he revealed to **Edge** are cause for a great deal of expectancy. The project must remain cloaked, however, until a forthcoming **Edge** feature.

"I used to think that I would love to go into films, but what is possible, and what we can do in games is changing, and the two are becoming ever closer"

Elite 4

On the record, all David Braben is willing to divulge is that *Elite 4* will use online technology and will be "a complete contrast" to what has gone before. "The problem I've had in the past," says Braben, "is talking too much to magazines. That can backfire."

There is definitely a feeling among fans that Braben can still improve upon the original. The problems with *Elite 3*, the now defunct Gametek, and the resultant falling out with co-author Ian Bell haven't helped. "The legal stuff really spoilt it for me," says Braben, "even though I finally won the case last year, which is why I haven't gone back to *Elite* for so long."



The popular space station docking sequence of *Elite* may not return in *Elite 4*, and sweeping changes in approach and style are expected to usher in a new era. Braben will not be disclosing secrets for some time



The explosions and lighting effects enhance the solidity of the environments. A great deal of variety is brought to the game by, eventually, providing the player with a uniquely mutatable craft. Weapons and gadgets all have their strategical uses, from simple plasma cannons to stun and limpet mines



Zoneof

Format: **PlayStation2**

Publisher: **Konami**

Developer: **In-house**

Release: **End 2000**

Origin: **Japan**

theEnders

Mecha, moral choices and the *Metal Gear Solid 2* team feature in this forthcoming Konami PlayStation2 title. Director Noriaki Okamura talks through his vision with Edge



The dramatic encounters between stylised mecha take place above inhabited cities, forcing players to make a series of moral choices to prevent collateral damage. Visually, *ZoE* is a melange of influences, from the unique designs of Yoji Shinkawa to more conventional anime, such as the 'Gundam' series

Amid the glare of publicity surrounding *Metal Gear Solid 2* at E3 in May, one of the few other titles to impress on PlayStation2 was another Konami game, *Zone of the Enders*. Perhaps this should come as no surprise considering the involvement of key *MGS* players Hideo Kojima and Yoji Shinkawa. And given the long and fruitful associations of mecha anime and the Japanese videogame industry, it is also unsurprising that the game features giant humanoid robots. **Noriaki Okamura**, director and scenario writer on the title, explains the cultural significance of the stylised automata: "Mecha are an important part of Japanese culture, like samurai, or cowboys to Americans. *ZoE* is certainly a great illustration of this Japanese mechanical culture with a strong taste of Japanese animation."

As well as the *MGS* stalwarts on the *ZoE* team – Kojima-san is producer and Shinkawa-san is mechanical designer – Konami has blended together people with an impressive array of backgrounds. "It is possible to divide my team into three groups," explains Okamura-san. "About a third of the team comes from Japanese animation. These people are very skilled and most of the projects they've worked on are very famous ('Gundam', 'Studio Gibli', etc).



"Mecha are an important part of Japanese culture, like samurai, or cowboys to Americans. *ZoE* is certainly a great illustration of this"





"The ultimate goal for me would be to write a game scenario which will make people cry through intense emotions. If I managed that, I would be the best in this industry"

Another third has worked in the videogame industry for a long time, while the remaining group includes people from a number of very different backgrounds, including the Japanese space agency, NASDA."

Ostensibly a mecha action game, *ZoE* attempts to set itself apart from the rest of the pack by placing an absorbing storyline at the heart of the gameplay, rather than just tacking it on to provide some rationale for combat. "In standard games you complete a stage and then you have a cinematic cut-scene, followed by the next stage. In such a case, I prefer to skip the action parts and watch the scenario," continues Okamura-san. "In *ZoE* I want to take another approach, in which the player is totally immersed in the scenario. According to the player's choices, the story changes in realtime." He goes on to describe the three main protagonists: Leo Stenbuck, a 14-year-old boy who is thrust by circumstance into piloting his mecha in the defence of Jupiter-orbiting space colony Antilia; his main adversary, Viola; and Celvice Klein, a supporting character for Leo.

"This very tense human drama is taking place in a space colony: a little oasis of life in the cold emptiness of space," explains the director. "Moreover, war is going on and people are fighting with gigantic robots in this fragile environment. As you can imagine, every move or attack that you make with your robot causes destruction around you. If using a bomb will destroy your enemy, what about the city? I would like the player to think about every action he will take." While some mecha have weak points that make it easier to minimise civilian casualties – notably the cockpit







"Viola (centre) is a very sad person, who lives in her past. She has no will to live, but to die. Celvice (top) supports Leo (above) by her strong will to live," explains Okamura-san (left)

The proliferation of mecha-based videogames have so far been unable to capture the human drama that is the hallmark of their anime counterparts. Okamura-san wants *ZoE* to be different



Photography: Hiroki Izumi







of piloted mecha – this is not always the case, imposing constraints upon the tactics used in any bout of combat.

Antilia consists of a long, circular strip that Leo can traverse by air. Scattered about its surface are a number of towns and other locations that are represented in greater detail. Throughout the game, players will have to make moral choices about exploring the map, as Okamura-san elaborates: "The player can travel freely. He may prefer to go to a location because he knows a secret item is present there. But the scenario will also require the player to address emergencies. So he will have to face a dilemma: if he goes to confront the enemy he may not get the item, but if he does go to get it, the town may be entirely destroyed. According to these choices, the story will take on a different aspect. I want the player to experience the world he has entered. So, I would like him to really understand what he is doing and to face difficult choices. Protecting lives is not that simple. *ZoE* will have a single story but a very flexible way to experience it. The player is part of *ZoE*'s human drama, so he will have significant consequences on the way the scenario develops."

Combat is reminiscent of a 3D beat 'em up. Although nothing has been decided yet, the possibility of including a twoplayer versus mode is being considered. The mecha's primary weapons are controlled by one button, at both short and long ranges, while another shoots secondary weapons, which can be customised. A third button is used in combination with the other two to produce special moves. Despite the similarities to games like *Virtual On*, it is intended that the combat will be





Weapons will be automatically selected according to the distance between mecha, and there are a number of special attacks







Improved rendering and better textures are on the way, but Okamura-san sees lavish graphics merely as a means to an end: "I think there is a way to express emotion through polygons. The scenario supports the visual side of the game, but as emotions flow with the game the cold polygons disappear"

much more accessible, and a dynamic camera will make novice mecha pilots feel much more at home. Indeed, as Okamura-san reveals, this was a crucial issue for the game's producer: "Kojima-san told me he does not want to make such mecha games because he does not feel comfortable with the issue of camera angles. He added that if he cannot enjoy the game, he would terminate the project! The game should be enjoyed by a large audience, so I had to study a system which will be easily understood by light users." The method decided upon consists of an automatic lock-on system, with the camera switching if necessary to keep the player's adversaries on screen. In the case of bouts with multiple enemies, the player can revert to a lock on button for a greater degree of control.

Given that part of the team is drawn from the world of mecha anime, it is to be expected that graphics are impressive. "From the very beginning, I wanted to make a Japanese animation game," stresses the director. "This was my fundamental idea. There are no motion captures in the game. All movements have been studied and reproduced in 3D by the same artists that have worked on major animation series or movies. So when you look at the game in motion, you will easily recognise the Japanese animation aesthetic by the movements and the camera angles. It is quite a similar process to that on *Metal Gear Solid*, which is why the game possesses such a cinematic visual impact." Mecha are constructed from around 3,000 polygons, and Okamura-san is optimistic that there will be up to ten onscreen at any one time. Background detail will include traffic. However, not everything is finished yet. "In fact, there are many elements and effects to add," he elaborates. "The final version will be quite different and will feature better rendering, better textures, better shadings." Yoji Shinkawa's involvement has no doubt also helped, as Okamura-san enthuses: "On *Metal Gear Solid 1* & *2*, he delivered a very realistic design style but *MGS* is based on a realistic military atmosphere, so he had to work within constraints. For *ZoE* we let him to do what he wanted to do. And the results are gorgeous."

Whether the pedigree of Shinkawa-san is enough to extend the appeal of *ZoE* to casual European gamers remains to be seen, but by attempting to attract support for the game from beyond the hardcore of mecha fans, Konami may invite more widespread support for this hitherto esoteric genre. In the context of the paucity of games that fulfil the hype surrounding the much-vaunted Emotion Engine, Okamura-san's bold attempt to place ethics at the heart of the game experience deserves notice. "The ultimate goal for me would be to write a game scenario which will make people cry through intense emotions. If I managed that, I would be the best in this industry."

"When you look at the game in motion, you will easily recognise the Japanese animation aesthetic by the movements and the camera angles. It is quite a similar process to *MGS*"



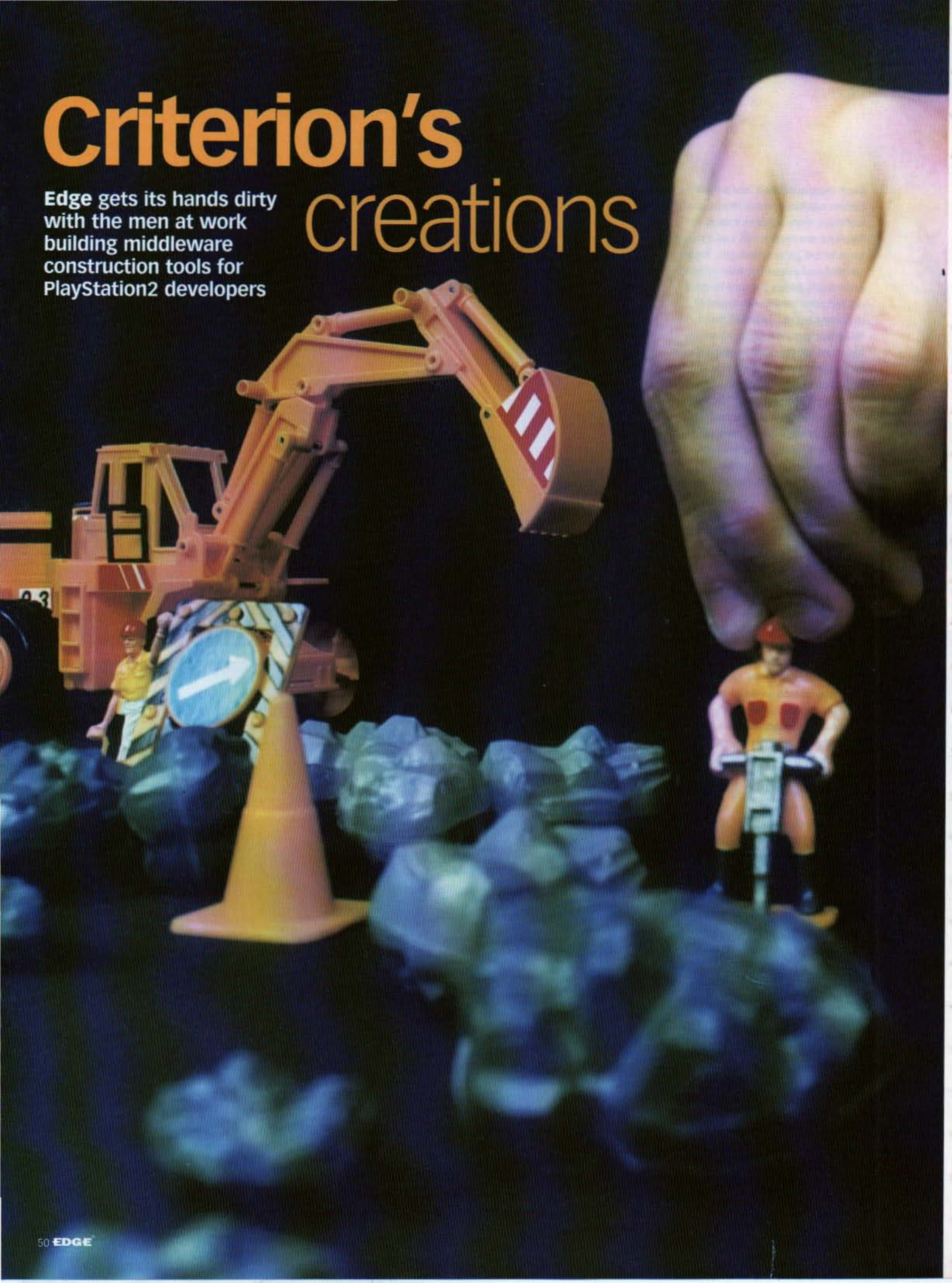
Kojima-san hopes that fluid camera movement will widen the appeal of *ZoE*



Some mecha feature Achilles-like chinks in their armour, allowing them to be taken out swiftly and with minimal harm to bystanders

Criterion's creations

Edge gets its hands dirty with the men at work building middleware construction tools for PlayStation2 developers





Criterion's star has risen in the east, twinkling in the green and blue activity lights of PlayStation2. With the videogame industry scrabbling around inside Sony's new box of tricks, bamboozled by its complexity, the middleware tools that Criterion makes seem to have come of age. An off-the-shelf 3D engine that's currently in its third incarnation, *Renderware* has celebrated its newfound appeal with two fresh products spun from the core code, *Rendervision* and *Renderengine*, and some new additions to its central product.

Where once developers shied away from the prospect of using bought-in technology, the sheer horsepower of PlayStation2 – coupled with the problems in harnessing it – has caused a reappraisal of the situation by the game industry. As Criterion MD

Renderware

There's an array of text layouts floating in layers on the screen, all at various stages of transparency or alpha-blend. Intermingled with the various fonts are winding lines which reveal themselves to be filled with perfectly blended colours as David Lau-Kee zooms through the crisply scaled text. This is one of *Renderware*'s latest additions: a 2D graphics handler that's completely resolution-independent, capable of scaling, stretching and animating visuals, fulfilling the same function in a game engine that Adobe's *Postscript* does in the publishing world.

Those who've encountered Adobe's *Illustrator*, or one of its rivals such as *Freehand*, will be intimate with the power of bezier curves and the EPS format. Fonts, graphic outlines, fills and blends are dealt with on a resolution-independent basis. On the Web the best parallel is Macromedia's *Flash* technology. Doing the same in the game world lends the potential for, at the least, far more interactive menus. And some beautifully crisp 2D games.

Lau-Kee relates that the thinking is a reversal of how 2D is often considered in the 3D age, that Criterion's approach is 3D-plus-2D, treating 2D visuals in a three-dimensional way, making use of next-gen benefits such as transparency and alpha-blending. The results are certainly attractive, and could lead to a new style in graphics, perhaps joining Sega's cel shading animation technique (seen in *Jet Grind Radio*) in the visual vanguard.

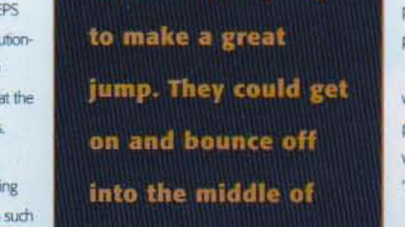
On other fronts, the implementation of what Lau-Kee dubs a 'Powerpipe' is the focus of much passion for him and the Technologies team. Its purpose is to free the order in which events happen in the generation of game visuals, and – crucially – it allows the operation of procedural nodes. This was espoused in E85 by Sony evangelist Phil Harrison (a copy of the interview lies open on Lau-Kee's desk when **Edge** visits) as being the true road to capturing PS2's power, and procedural generation of textures and objects from fractal mathematics is an exciting prospect for the technically minded.

Lau-Kee explains the process with an example: "One single particle perhaps blooms up into something that's the shape of a snowflake. I haven't transformed all the vertices for the snowflake, because I got it to the end [of the 'Powerpipe'] and transformed them there and then." So a single algorithm contains all the information for making a snowflake appear – it doesn't exist as a texture map, or a pre-designed combination of polygons. Similarly, texture maps can be generated at the end of Criterion's 'Powerpipe' – from pure maths – not carried all the way through as a large chunk of information.

"I don't believe it will negate the need for more traditional ways of doing things; they will always exist, and they will be used in parallel," says Lau-Kee. "I think you'll see more and more effort going into these special purpose nodes, for generating procedurally what things look like, without a doubt. And you can see that because of the way these new architectures are going, in terms of the compute power distributed through the system that you can make use of."

With Beta copies of the 'Powerpipe'-enabled version of *Renderware* already in the hands of Criterion's top-tier customers, the wheels are already in motion for widespread use of the technology. "There's still the process of trying to learn about it at the moment. What we're lacking at the moment is detailed documentation that allows others to step through it," admits Lau-Kee. "At that level anybody who's got *Renderware* will have the capability to do that. Whether they're able to use that capability depends entirely on their ability as programmers." Consider the gauntlet well and truly thrown down – by both Criterion and Sony.

"The springboard from which people can move on is more powerful. It doesn't mean they're going to make a great jump. They could get on and bounce off into the middle of nowhere. It's kind of out of our hands"



■ David Lau-Kee

Rendervision

The most immediate and tangible advance in Criterion's new work with *Renderware* is one of those inventions it's hard to imagine life without after it has arrived. Dubbed *Rendervision*, it is, in simple form, a 3D engine that allows an animation created in a traditional software package such as *3DS Max* or *Maya* to be run in realtime on a host platform – in this instance PlayStation2.

"The game designers and artists upstairs were like, 'Show us it when it's done'," recalls David Lau-Kee. "We took artwork that had been produced for an AVI, and ran that through it. It was early and so there were glitches and this that and the other, but instantly they were saying, 'Shit, yeah, we can see it now'. And they wanted it."

Edge was treated to several demos of *Renderware* in action while at Criterion, starting with the movie that was created for *Stunt Squad*. Notionally a sequel to the Dreamcast launch game *TrickStyle*, *Stunt Squad* features a gameplay system that is much modified from that of its predecessor. The immediacy of seeing *Stunt Squad* running on PS2, albeit in rolling demo form, lends its fresh conceptual direction a weight several orders of magnitude greater than any *PowerPoint* presentation. Publishers have been suitably impressed.

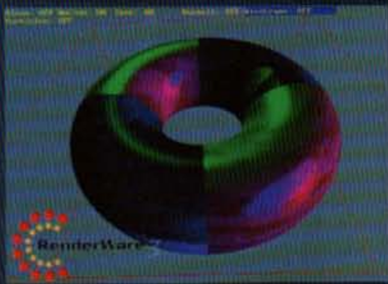
"That's entirely what rapid prototyping is about," says Lau-Kee. "What *Rendervision* is about. It's to allow you to get all the insight into the stuff that you might think about at the end of the project, bring it forward so that you get that insight really early on. You might continue down that line, but you know consciously that you've made a decision to do that."

There is scope for much more to come from *Rendervision*. Already it is possible to move a camera around objects and maps in realtime on PS2, not just run through preset animations. Much more interactivity is planned. "Within the authoring tools you'll be able to do things like set up trigger points, get in the player," Lau-Kee eagerly explains. "And that essentially will be the framework for the entire game, and you'll add to that to make the game itself."

Talk of a game construction kit blooming out from *Rendervision* rings true with Criterion's thinking. "I see a sliding scale," agrees Lau-Kee. "At one end there's construction kit-type stuff, in the sense that it's point and click; change parameters, change how things are interacting. Some great content will be produced from that side of things. I think there's huge scope for episodic content, where you want to get the framework up and going, and then you want to go through it again and again, changing the content, getting the next episode together."

He also feels that *Rendervision* deserves a place in the hearts of Japan's epic makers. "It'll be used as a high-end professional power tool, where people are free to be considering the higher concepts of a bigger notion of how the game's going to be – that all-encompassing sense that you need if you're going to build something like *Final Fantasy*. And for that you need all the tools you can get."

Talk of episodic content suggests that Criterion may have an important role in the vast, broadband future. So does Lau-Kee see a possible *Rendernet* product on the horizon? "I think absolutely there is, and that product is primarily about how you co-ordinate these assets, the graphics side, or sound, music or speech, orchestrate them and then squirts them down a pipe to the playing end," he enthuses. "If you look at what we're doing with the *Rendervision* stuff, in terms of opening up the file format, we'll be adding scope in there for video, audio, and then what have you got? Well, in effect you've got something that produces this broadband stream for you."






■ Neil Manners, artist, *Stunt Squad*







The torus (top) demonstrates auto surface refinement, a new feature in *Renderware*, introducing extra polys as objects approach the camera. An aspect of the *Rendervision* middleware component is its 2D handling capacity (above), which zooms, stretches and manipulates flat imagery with ease



■ Ed Hayden, artist, *Stunt Squad*

David Lau-Kee puts it: "There's a lot of stuff, an awful lot of stuff that's in development using *Renderware*." It is no longer seen as a hindrance, but as a help.

"The whole issue is that without these tools, without the help, without the middleware, what are you going to do? How are you going to do it?" quizzes Lau-Kee. "As a developer you have to make a fundamental choice about whether you want to produce a great game that people love, or whether you want to play around with technology. That's what it's coming down to these days."

That does not mean, however, that the days of the coder are numbered. Far from it. "We've been thinking about putting *Renderware* out with a big label on the front saying 'some programming required'. Unless you're capable of getting in there and using your skills and creativity, from a programming perspective, it's not going to work," he explains. "The performance scepticism has gone away a great deal," he adds, "though there continues to be a need to educate people about best practice. Our efforts these days are more focused in terms of working with developers, explaining to them how things work in certain ways."

Having to deal with over-ambitious developers can hold its problems, too. "Fundamentally, if you want something that's got ten gigs of textures in it, something's got to give. Either you're going to take a performance hit because you're swapping textures up and down, or you're going to have to cut down on the size of them," Lau-Kee points out. "Yet to an extent we carry some of the responsibility and some of the blame for them not being able to do it because of the basic parameters of the platform."

Lau-Kee is keen to convey the message that the ever-growing *Renderware* suite of products are purely enablers, tools with which to fashion better games. "You'll be able to produce a range of games quite straightforwardly using it. But you will also want the flexibility to get in there and change things," he says. "It's the same thing as the *Quake* engine: having the *Quake* engine doesn't mean you're going to come up with a great game – it means certain things will work for you, and you can focus what it doesn't provide for you, because that's the creative aspect to it."

As for PlayStation2's tangled technical web, Lau-Kee is surprisingly modest about the benefits Criterion offers. "There are lots of smart people out there, they'll get their heads around it. The question is, do you want them to be spending all their time getting their heads around it?" And that is the real core of what middleware is all about. He illustrates this by explaining that: "You could have someone who's a real specialist on the vector units,






***Renderware* at work (from top): a cartoon-style character with flat colour use; a cube rendered to a texture, then projected on to geometry (through Criterion's 'PowerPipe'); a selection of reflection-mapped fish; and streaming video projected upon geometry**

Renderengine

Stopping part way through **Edge**'s tour of Criterion's HQ, it's hard to focus attention on what Lau-Kee is saying. There's something rather unexpected running on a widescreen plasma display over his shoulder. One of his key coders is fiddling with a joypad, steering a camera around the opening scenes from Valve's seminal PC shooter *Half-Life*. On PlayStation2.

This is *Renderengine*, a specific, firstperson 3D game engine extrapolated from Criterion's core *Renderware* code. Its purpose is clear: to demonstrate to developers that the potential of *Renderware* can be spun into any desired genre. Non-generic behavioural hooks have been woven into the code – triggers that will be used to activate specific pieces of programming – allowing programmers rapid access to the basic building blocks of the firstperson genre, such as doors, triggers and switches.

"We took what we saw to be a superb example of the genre – in this case it was *Half-Life* – and we looked at the level files that were produced, the .PAK files," explains Lau-Kee. "Essentially we've implemented stuff that allows us to completely parse those files, handle anything that's encoded in those files. And that gives you the confidence that what you have at engine level is going to be capable, in the right hands," he pauses for effect, "of producing a game that's as good as something we thought was terrific."

As with *Renderware*, Criterion's emphasis has been to retain an open approach to the code, leaving the path clear for developers to tweak, add and enhance in whichever ways they wish. "*Renderengine* puts out something which is a framework," Lau-Kee explains. "That framework is filled in with certain things, and you might be happy with all those things. It might be that you want to change the framework – just get in there and change it."

In terms of Lau-Kee's overall strategy for the growth of *Renderware*, *Renderengine* is only an intermediate step toward a greater goal: the development of a superengine.

"It [*Renderengine*] contributes to generalising from a specific game engine, taking the concepts which are valid across a number of genres and being able to place them down as automatic features for what we're thinking of as a superengine. As in, it's not tied to one specific genre.

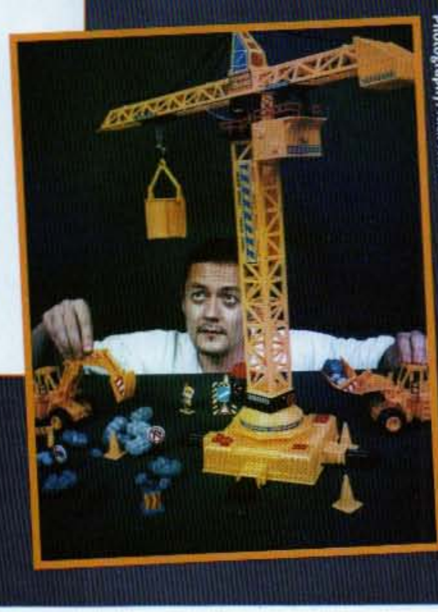
"What we may well do, using a desktop publishing analogy, is say: here's the superengine, here are a number of templates; here's a template for a firstperson shooter, here's one for a platform game, here's one for something else." The implications of this are complex and demanding for Criterion, and Lau-Kee drifts away for a moment, winding through his thoughts.

Discussion of *Renderengine*'s essential similarity to what has happened with id Software's 3D engines over the years brings him back. "In my mind, that's the single most astonishing result of what the id guys did – they figured out early on that having that high level of abstraction wouldn't take away from the game, it would allow them to make a better game." He bubbles with praise for the Texan codewarriors. "They were thinking about these game construction tools and toolkits and producing great results when the rest of the world was thinking that you could never do stuff like that, or it wouldn't be flexible enough for you to do decent stuff. Well, rubbish."

While *Half-Life* is a superb validation of licensing specific 3D engines, surely there's a worry that a raft of me-too games will grow from a shared root? Lau-Kee, understandably, passes on this point. "You have the game engine in there, and that's your starting point, but in terms of making a great game it's the creativity of the guys who are working on it that matters."

He reaches for an analogy. "The springboard from which people can move on is more powerful. It doesn't mean they're going to make a great jump. They could get on and bounce off into the middle of nowhere. It's kind of out of our hands."





Photography: Nick Wilson







Criterion's next game project, *Stunt Squad*, is shown here (top) in its *Rendervision* incarnation on PS2, and in its *3D Studio Max* incarnation (centre). The ease of getting something up and running from conceptual work is staggering. The component is adaptable to any form of visual representation (above)



■ Peter Lake, artist, *Stunt Squad*

and somebody else who's a real specialist on DMA – how to orchestrate things. To expect one person to know all those areas hugely intimately, the way they could with previous systems, is expecting too much."

Although strongly allied to Sony at the moment, *Renderware* is clearly a platform-independent app, having already been used in Criterion's own Dreamcast titles *TrickStyle* and *Deep Fighter*. "Our stance is that we're interested in working with game developers. We find ourselves tied more to them and what they want from us, than we are to a particular format," Lau-Kee elaborates. "If there's a lot of pressure for us to be moving in a particular direction because that's what our customer base wants – it's down to us to give them what they want."

As Lau-Kee reels through the current three hot properties on videogaming's Monopoly board – PS2, X-Box and Dolphin – it seems clear that those customers have already submitted a few requests, but he refuses to be drawn on any specific deals, saying only that: "Other platforms are really interesting to us." Aside from PS2 TOOL dev kits (sat in steel cages bolted to the office floor. "They're $20,000 a time, and that's only the deposit"), there are other curious, nameless boxes dotted around Criterion's building. Something is afoot, Watson...

With the core product proving its use anew each day, the potential is there for *Renderware* to be spun into further areas of development. "*Renderware* allows us to produce ever more sophisticated and useful tools – and *Rendervision* is an example of that," Lau-Kee points out. "There are some other things that are vitally important in a game – audio, maybe the physics stuff, the networking stuff. Anything we can do to produce power tools is a good thing.

"And so yes, you will see more and more integration and better coexistence between our set of products and other technologies that either we don't show you directly ourselves or other people don't show. You'll see the whole thing coming together."

Criterion Technologies has come a long way in the last few years, as has its sister game studio, not least in understanding its position in the grand scheme of things. "The great technology is the beginning of the process, rather than being the end of the process like it was five or six years ago," smiles Lau-Kee. "We learnt a lot along the way about how to dispense with our arrogance that we could do everything, and to understand that we're just part of the puzzle. Our job is to produce things that allow other people to do their thing. The time is right for it to happen." ■



G-Surfers

There's nothing strange in creating a world for a videogame, but developer Blade Interactive has set its sights on accurately representing the whole of planet Earth on PlayStation2. Edge tapped into the thoughts of the team busy playing God

Format: **PlayStation2**

Publisher: **TBC**

Developer: **Blade Interactive**

Release: **TBC**

Origin: **UK**

Edge readers will be only too familiar with the grandiloquent boasts of developers who claim to be pushing back the frontiers of technology, defining new genres and modes of gameplay in the process. The frequency with which such assertions founder under scrutiny seems not to deter the next pretender in line. Every so often, though, closer examination can bear extraordinary fruit. Elixir's *Republic* is a classic example based on its E3 reception, not least because of the scepticism it provoked when it made its debut in these pages.

In light of the weak performance of software for PlayStation2 since its launch in Japan, it is difficult not to be sceptical when presented with the concept of a game for the console that features a representation of the entirety of planet Earth – all 2.2 trillion polygons of it, in game form. Especially when it originates from a little known codeshop in Manchester. But it is now the turn of Blade Interactive's *G-Surfers* to endure rigorous analysis.

Blade was set up some 18 months ago with the specific aim of developing next generation titles. Having cut its teeth on the well-received PlayStation title *World Championship Snooker*, published by Codemasters, the team is now free to do just that. **Edge** spoke to managing director **Debbie Jones**, as well as development director **Gary Leach**, R&D director **Huw Lloyd**, and game designer and programmer **Mike Singleton**. The majority of the team – which boasts several physics PhDs – worked on the aforementioned snooker title, but it is Singleton who is most likely to be known to **Edge** readers familiar with such titles as *Lords of Midnight*, released in 1984 for the ZX Spectrum, and *Midwinter*.

Singleton's vast experience has not, however, deterred the team from the apparent folly of attempting to include the whole of the planet in one game. Ostensibly a futuristic racing game akin to ▶









In Free Flight mode (top) players are free to tour the planet, viewing landmark buildings such as St Paul's. During races (centre and above) the onus is on staying on the track and passing waypoints

Wipeout, *G-Surfers* features craft that hover above Earth's surface and travel at up to 7,000mph. But for the concept to work, it is essential that the planet is convincingly portrayed. Blade is confident that its engine is up to the task. The procedural generation of a landscape is one of the PlayStation2 capabilities that, while mooted by Phil Harrison, has been noticeably absent from any titles appearing so far for the platform. No doubt there are other developers working on such an approach, but Blade is among the first, and seems to be making good ground. "Fundamentally it's done on a block-by-block basis," outlines Leach, describing the generation of a deformable mesh that lies at the heart of the engine. "Huw's system generates a list of block stats we want to mesh out, and then we have a core vector unit routine which blasts through them and takes four high points. Through interpolation we generate that bit of mesh, and at the same time the CPU and vector unit nought are being used to generate the vectors they go under." Surprisingly, the team does not envisage the need for a hard drive to provide its engine with persistence. "To a limited extent we can deform the landscape just by storing a list of deformation points, and when you come to render it you just use them to move the vertices down. And because those are quite small you can just store them on a memory card."

It is difficult not to be sceptical when presented with the concept of a game that features a representation of the entirety of planet Earth – all 2.2 trillion polygons of it

Although the game is shown at an early stage, in the finished version futuristic laser hoardings will dot the courses. The depiction of navigation aids have also yet to be finalised





Draw distances are another impressive aspect of the code, with the current engine supporting views of 32km. Objects in the distance are initially composed of few polygons, but as the camera nears them this number gradually increases, with breathtaking results.

Getting the detail right

The use of satellite data enables the engine to produce a topographically sound representation of the Earth. Jones is keen to point out that this results in even more inspiring vistas: "When you fly through London you'll see the Thames, you'll see the landmark buildings like the Houses of Parliament. We'd be here until 3000 if we did every last building. I mean, all the planetary scale is impossible. What you can do, though, is take raw data as to the footprint size of the city and the building types within that, and then procedurally generate them along road systems. The road systems that run through the cities are the real road systems, and the procedural planting of buildings plants them along the road network. What we did was to take a load of accurate data – which are height points on the planet's surface – and Huw then produced an engine which interpolates those and fills the gaps in between them. But it doesn't really end there, because we needed then to get different sets of data for things like roads, rivers, the procedural textures to what the landscape is like in that part of the world, and that process is still ongoing because obviously there are a lot of procedural textures you need to generate for a world." Indeed, without procedural texturing it would be far too great a task to incorporate the scale that is featured in the game.


Debbie Jones



Photography: Martin Tompson

"One fact that I worked out the other day," says Lloyd, "is that if you exported the mesh textures and put it on CDs in jewel cases and stacked it, it would be a kilometre-and-a-half high. It's the sort of game that you can either ship in a box that's the cube root of a kilometre and a half or you can come up with it procedurally. So we decided on the obvious route."

Putting miles on the engine

It is, therefore, easy to see why Blade won't be confining such endeavour to just one game, or indeed a single planet. "The engine is not just designed for *G-Surfers*," Lloyd continues. "It's designed for an ongoing series of games of which *G-Surfers* is one of the first to take advantage." Jones is more sanguine: "Nobody's done anything like this in terms of scale and vision and it's an experience in itself, because we now have free reign to design perfect gameplay of tracks in a realworld environment. But I mean the flexibility of the landscapes – it can actually go out almost to planetary scale, miles above the surface, and zoom into the actual surface – is stunning, so to do something like a future space trading game or something of that nature where you're actually visiting alien planets is possible. We can produce realtime landscapes of planetary size, so you can fly to the surface and see what that particular world is like and just give each one different criteria for the creation of terrain. Not to mention other bodies in the solar system."

Perhaps with this in mind, objects that are placed using the engine are given a 'birthday'. "Whenever you place an object, as well as deciding its position and size it's also fairly easy to give it a birthday, so that as the clock winds forwards, as you're rendering these objects you check their birthday. So if it's a tree, it gets



Mike Singleton

bigger, for example," explains Lloyd. Another example, which is perhaps more appropriate for a space trading game as mentioned above, is a population centre that can vary in size over time.

The course of *G-Surfers'* development has seen several unforeseen obstacles overcome, standing the team in good stead for future iterations of the engine. "One of the things that we've been spending quite a lot of time looking at is that there's a lot of stuff from the classic 3D rendering textures based around offline processes, prerendered scenes and stuff, and we've been going through that working out what we can do in realtime," says Leach. The combination of several planar data sets to form a seamless sphere is another task that required Blade's programmers to think outside the box, and which, according to Leach, had Lloyd tearing his hair out for some time.

PlayStation2 problems

Developing for PlayStation2 has presented its own set of problems, too, though Blade was well placed to take advantage of the experience of Singleton and the youthful enthusiasm of Leach. "To get the best out of it you need to not just be an assembly language coder, but you need to love assembly language coding," argues Leach. "Because you've got these two streams going on in the vector unit model; you've got to interleave them and you've got to be thinking all the time about how to use the vectors. You've got to love it, really – not only the programming, but the architecture. You can use it very simply: vector unit one does the rendering and the other one does the game control. That's not going to get you much out of it. You need to be thinking in terms of DMA listings, interruptings and timings. You know, the kind of stuff that used to be done on the Amiga and ST." Singleton adds: "I can't see someone who has just done C getting to grips with something like vector units."

Not that the platform is without problems for which assembly language coding doesn't help. The random-number generator is one example, though in this case Leach is forgiving: "I don't think it's designed to be used as a pure random number generator. I think it's just designed to be used as well as a random-number generator to get a random effect." Nevertheless, the team has been constrained, as Leach explains: "One of the things that we're



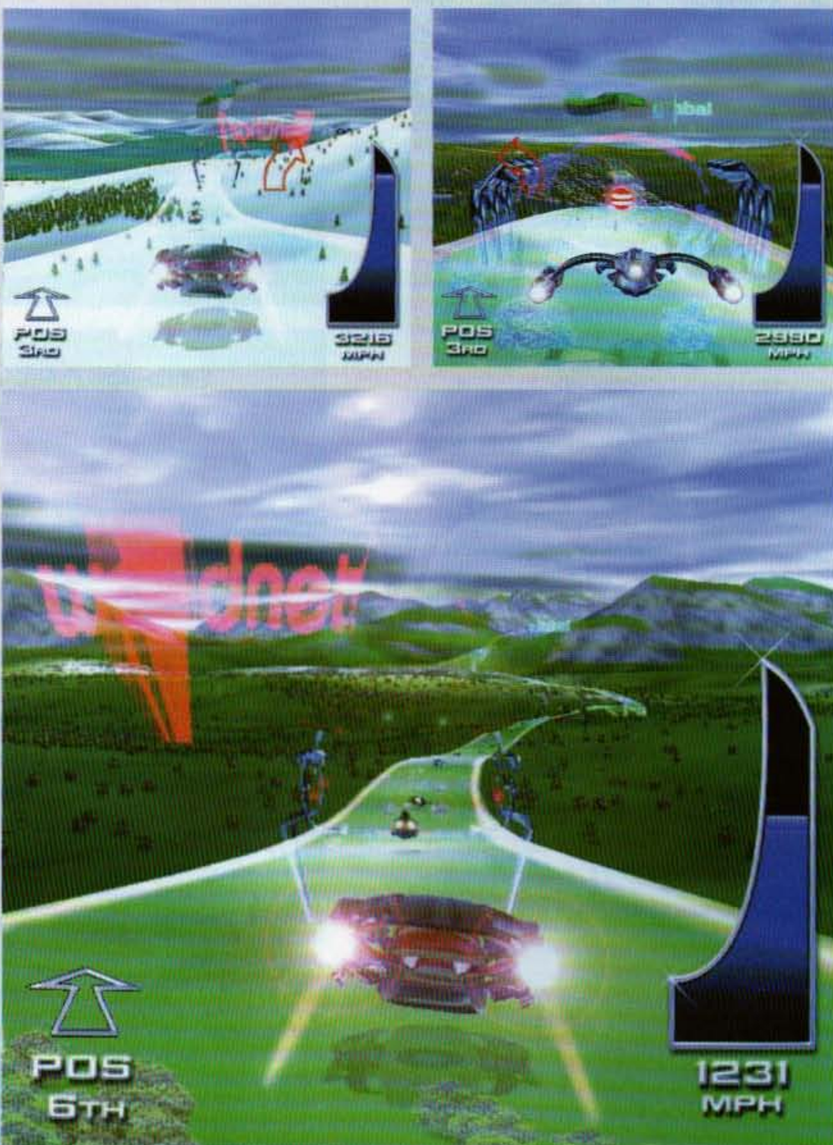
Huw Lloyd



Splitscreen multiplayer games will have to suffice in place of networked games. The nature of multiplayer modes is still to be determined, but head to head is a certainty



Gary Leach



The combination of a geographically accurate playing surface and a unique handling system results in some interesting challenges, such as tracks that cling to the sides of mountains. The use of the craft's side thrusters in such instances will be necessary to keep to the track



struggling with a little bit is memory on the PS2, which is not overly fast. So we're having to put quite a lot of time into some sophisticated memory management systems." As a result the team remains open-minded about developing for other platforms. "The things we're doing at the moment are starting to really push what PS2 can do," claims Leach. "We're not really doing something that PS2 is best at. We're just doing what we want to do for the future, and so really it makes no sense at all to stick to PS2. We have to take it beyond that. Each time you take a little extra step forward and get slightly better RAM and various things, it's all going to help." The engine itself is fairly versatile and should be ported to other platforms quite easily. "The core of the technology has been developed on the PC, and one of the feedback processes that we have is that Huw puts together a nice bit of code and I will redesign it so we come back with something that works well on the PS2," explains Leach. "We have about 90 per cent of the code completely portable, and it really doesn't make any difference what machine you're running it on, and then ten per cent – like the vector unit stuff – obviously that's not portable, you'd need to rewrite that for any other platform." Though Jones is keen to stress that Blade will not be responsible for any shortcuts taken should *G-Surfers* be ported to any other next-generation platforms.

The gameplay/graphics balance

Another area in which Blade is determined not to take any shortcuts is gameplay, as Leach explains: "Although it sounds like we're putting everything into the technology behind it, we've got about half of the team on the technology and half the team on the game, and they're more or less going independently now. We've got to the stage where Mike's heading up



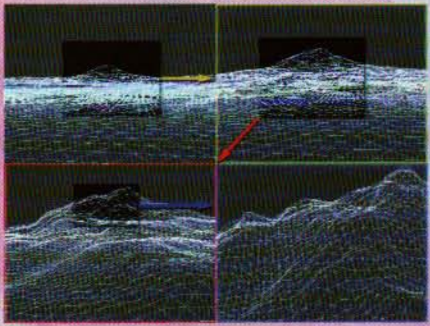
the game side, and he can be without reference to what we're doing vis-à-vis adding new features to the game and stuff. So while Huw and I are really pushing this technology, the rest of the game is being developed alongside of it." Singleton's seasoned wisdom will no doubt help "There are a lot of similar elements to my previous work – particularly something like *Midwinter*," he explains. "We had a huge range of vehicles in that, ranging from submarines, through to tanks and planes. All of that requires pseudo physics in order for it to feel right, not necessarily to be right. It's the gameplay feel of it. It's fictional physics, if you

"In one of the levels we designed in Japan you slam into Mount Fuji at about 4,000mph. That's enough to propel you a mile or so in the air, and you bounce clear over Nagoya"

like. Physics doesn't really exist, so you've got to get something to suspend this disbelief." And he has been comprehensive in his approach to finding that something, as Jones points out: "What we've done is we've started from several very sound gameplay principles and we've designed the courses. Our chaps have taken apart every major racing game that's been done, in terms of the number of times you need to brake, the number of times per second or minute you need to brake, the incidence of corners, the incidence of bad corners. What we've tried to do is lay down a blueprint for the easy, medium and hard courses, and then design those parameters around realworld data." She is also keen to stress that the structure of the game is sound. The basic race mode features a huge number of courses and vehicles. Indeed the realworld setting provides its own gameplay hooks: "In one of the levels we designed in Japan you slam into Mt Fuji at about 4,000mph. That's enough to propel you a mile or so in the air, and you bounce clear over Nagoya. It's an experience. There is no other engine that will give you anything like that flexibility, and by the same token, you've got levels that dip down to street level – flying through LA."

In addition to basic acceleration and turning controls, ships are equipped with side thrusters to assist handling. Courses are punctuated by the usual raft of power-ups and obstacles, such as mines. But in case players are disappointed by not being able to stop and admire the scenery, a free-fly mode is also available, in which the whole world can be explored. It is also planned that further vehicles and power-ups can be unlocked through diligent exploration.

G-Surfers is undoubtedly an impressive advert for the technical capability of PlayStation2, and will serve as a wake-up call to developers who persist in treating the console as a mere upgrade of its 32bit precursor. But gamers will judge the title on gameplay alone – and this factor is still very much a work in progress. According to Singleton, "the latest revision was to try and exaggerate the rollercoaster feel of it, but most people think we've gone too far in that direction so we're going to have to tone it down again." Apparently people were getting queasy.



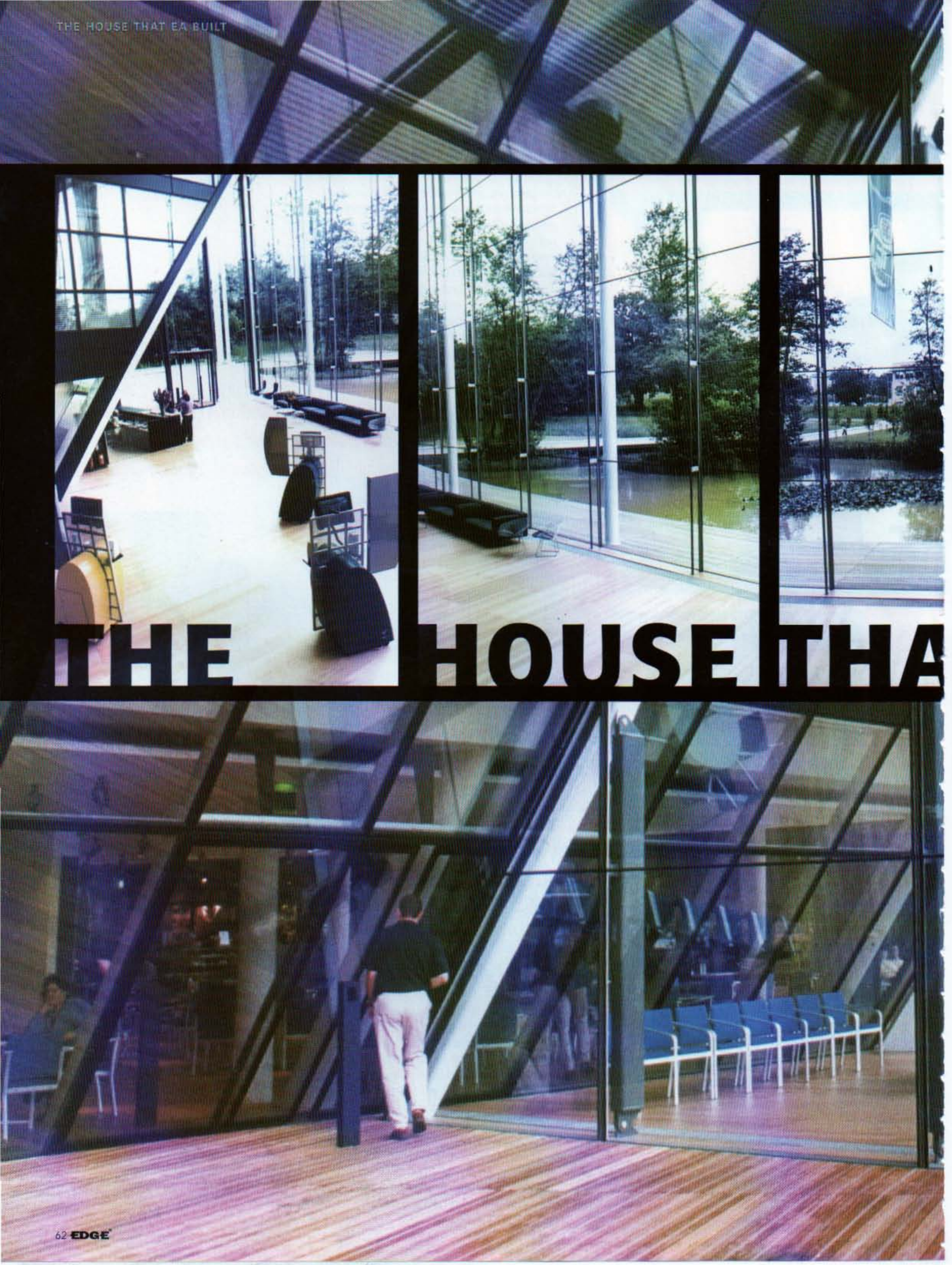
This sequence illustrates the procedural generation of the wireframe mesh that makes up the landscape. Based on actual satellite data, distant objects are constructed from a small number of polygons, with this amount increasing as the object moves closer to the foreground. Although topographically accurate and featuring authentic roads and rivers, unfortunately you won't be able to fly over your own house, but landmark buildings will feature in the game







There is still work to be done on the textures that will be used in the finished game, but, even so, these screenshots demonstrate a high level of detail



THE HOUSE THA



Photography: Nick Wilson

T EA BUILT



Forget sheds on grimy industrial estates, EA Europe's new 'daylight and latte' studio complex is a breath of fresh air. Edge paid a visit to the 'campus' to see what all the fuss is all about

The little computer people are unhappy. They hate commuting into their shabby office. The journey is long. The traffic's horrible. They have to get their snacks from a sandwich van. They are burgled regularly. Some suffer from Sick Building Syndrome. They feel tired. They get home late. And they're miles away from the nearest decent espresso machine. Their needs are rising, their mood souring and not even Will Wright's success can cheer them up. It's a scandalous state of affairs, but no – this isn't a snapshot of **Edge**'s increasingly experimental approach to *The Sims*. Instead, it was the situation that had been brewing at Electronic Arts, the game's publisher, over the past couple of years.

Despite being Europe's largest games company, with annual sales of $500m, the



company had a problem. It was the biggest, but was it the place wherethe best people wanted to work? But, being EA, the solution was as impressive as its domination of the games industry. Three years after drawing up a design brief, EA's sparkling new £20 million European HQ is now officially open. And it looks more like a bonus that appears at the end of Wright's *SimCity 3000* than anything from his people simulator.

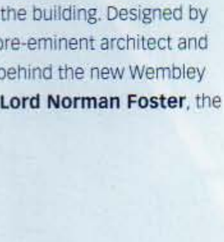
New way to work

While the address of the new building – 2000, Hillswood Drive – sounds like it should be an exclusive Silicon Valley locale, it actually sits neatly within the greenery of a Surrey business park. Dominating the view, the gentle arcing front of the steel and glass structure and the wooden decking give it a slightly nautical feel. Two 50-foot panels can even be rolled out to allow access to a man-made lake that runs the length of the building. Designed by Britain's pre-eminent architect and the man behind the new Wembley Stadium, **Lord Norman Foster**, the

Perhaps the only downside to this glass-and-steel monster is its location: with staff now having to commute, the down-the-pub-for-beer-after-work culture has been eroded. This, it is said, has resulted in a number of resignations of late







campus, as it is called, is more concerned with the well-being of its inhabitants than high-performance architecture, however. "This building is about communication between individuals and breaking down barriers between individuals and teams," says Foster, explaining the underlying social engineering of the project.

Not only has EA conglomerated its three UK offices, mixing suited marketing execs with bovver-booted developers, but it has set up an egalitarian environment in which everyone eats in the same restaurant and has free access to the gym. No one has a separate office, everyone works in the same open-plan cubicles. No one has a desk with a view, everyone shares the daylight that floods in. There are plenty of spaces for informal meetings, as well as the usual selection of top-of-the-range presentation rooms.

This sharing of facilities allows for more integration between the 520 staff. Previously the 250 Guildford-based developers were separate from the rest of the company. There is something ▶





Shades of *GoldenEye* surround the lavish £20m construction

refreshing seeing the two cultures mix for the first time. "Sometimes he wears a dog collar," remarks one exec, pointing out a particularly gothically inspired coder. She almost seems impressed.

Building for growth

"Our success is about our people. I can't think of another industry where you are totally dependent upon the minds of the people who work for you," explains EA Europe's MD **David Gardner**, or 'DG' as he is known to the employees. And yes, even he is the proud possessor of a standard cubicle without window view – although he will admit to having the best flat-screen monitor (one of the advantages of being a board member). Yet as he takes **Edge** on a guided tour, it's clear that he's serious about the impact he expects it to make. "Has the quality of your work improved since you've moved here?" he asks a marketing man, who's demoing a Japanese PS2 version of *FIFA*. "Absolutely," comes the reply. The only person with a bad thing to say about the building is Lord Foster himself. He's annoyed with the failure of the glue on some of the Spanish wooden floor tiles. "They've told me new ones are on the way," he apologises. But EA's staff are enthusiastic about their new working environment.









The company games area (right) encourages employees to indulge in play even when they're away from their desks

The food in the restaurant is excellent and cheap. There's a shop selling papers, sweets, toothpaste and other bits and pieces. Lakeside barbeques will be organised on summer Friday evenings. There's a software and hardware library (staff also get ten free EA games a year), a floodlit five-a-side football pitch, a coffee bar and the EA-themed sports bar. Ironically, considering EA's reluctance to publish for Dreamcast, *Sega Rally 2* and *Virtua Striker* nestle next to a table football in the games room . "Sega do make the best arcade games," Gardner

"This building is **about communication** between individuals and **breaking down barriers** between individuals and teams"







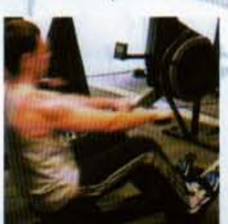
Norman Foster's plans (above) represent just the first stage of EA's construction – a mirror-image version of the site is set to be built opposite the original. The five-a-side pitch (below) is used every single lunchtime







Even lowly post-room staff get perks (above). The in-house gymnasium (below) encourages the fight against the ill effects of pizza and Coke





Campus statistics

- The workforce spent 770 days (based on working 24 hours, seven days a week) building the campus, compared to the 410 days it took to build the Empire State Building.
- The three-and-a-half storey sliding doors that form part of the Eiffel front curved wall are thought to be the first to use aircraft hangar door mechanisms outside of an actual aircraft hangar.
- The total area of EA is built on 55,000m^2, nearly double the size of Canary Wharf station on the Jubilee Line, which is 31,500 m^2.
- Four hundred and sixty four tons of steel were used; this is double the weight of the Statue of Liberty (which weighs 225 tons).
- The current number of employees could field 102 five-a-side teams on the EA Sports football pitch on campus.
- Norman Foster continues a proud tradition of architecture with EA's campus. It sits on what were once the grounds of Bottley's Manor, designed by Kenton Grouse (architect of 10, Downing Street).
- The average three-bedroom semi-detached house has an average annual fuel bill of £500. The energy-saving features incorporated into the design of campus will save an estimated £50,000, or the energy required to run 100 households for a year.

concedes. Staff don't even use cash to make purchases, thanks to a smart card system that takes the accumulative monthly amount directly from their wages.

There's even a system whereby online orders to the local Waitrose are delivered in insulated containers to a dedicated cold storage room by 4.30pm to ease the burden of the weekly shop. "I save two hours a week," says Gardner, before revealing that he actually spends the time he saves in the office.

In fact, the only minor problems with the campus seem to be the lack of a smoking area for those who need a nicotine fix and the rejection of planning permission for a dormitory for teams during development crunches. Apart from that, it's full speed ahead. Plans are already underway for phase two of the development, which would see a mirror-image of the campus constructed next to the original and connected by aerial walkways. "This building isn't a symbol of how far we've come but how far we need to go. It is a platform for our future," states Gardner. Predictably EA expects to have released about a dozen PS2 titles by Christmas, including F1 titles currently under development in Surrey. And while it's unlikely that the new office environment will be apparent to the millions who will strap themselves into Schumacher's Ferrari for a videogame spin around Monaco, it's good to know that EA's little computer people are finally getting sunlight, satisfaction and a good cappuccino.

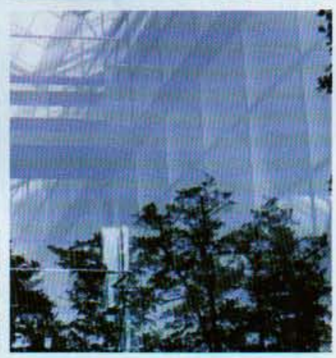
















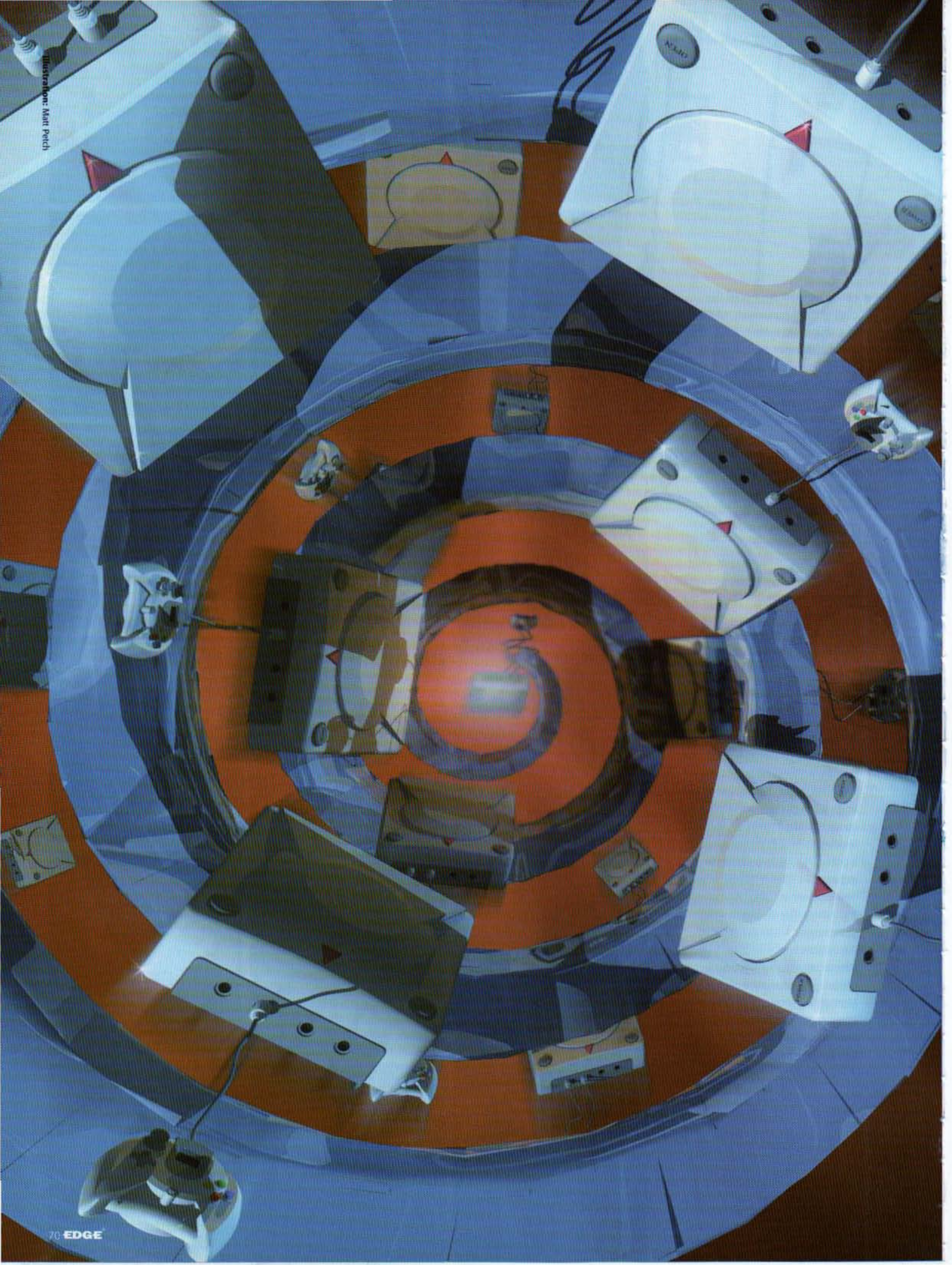
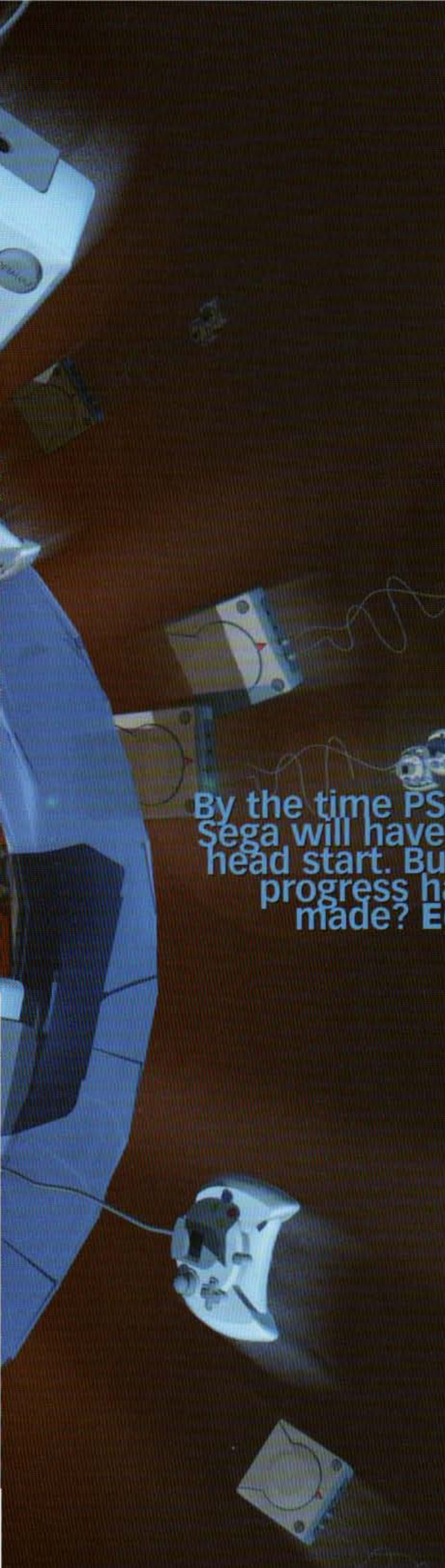


Illustration: Matt Petch

Ever decreasing circles?



By the time PS2 launches here, Sega will have had a 12-month head start. But just how much progress has its Dreamcast made? Edge investigates

If Sega's latest domestic hardware venture fails – as the Mega CD, 32X and Saturn (respectable 'second place' billing in Japan notwithstanding) did – it's hard to imagine the company raising the capital or, more importantly, the industry support to try again. Few dispute its clout as a developer of software, and no one could question its might within the coin-op sector. But, even now, the abysmal performance of the Saturn in the west serves to hamper Sega's credibility.

From day one, it was clear that the original PlayStation was the superior poly-pushing machine. As industry legend has it, the Saturn's 3D functionality was 'bolted on' at a late juncture in its R&D stage. Codeshops were aghast at its confusing architecture and Sega's recalcitrant approach to releasing development tools. Sony, by contrast, made every effort to woo talent. The remainder of the story is the stuff of videogaming legend: Sega paid dearly for its arrogance and the PlayStation became the console of choice, with Saturn conversions farmed out to jobbing codeshops paid to port within restrictive timeframes. Is it any wonder, then, that Saturn software was so consistently a pale reflection of its PS equivalent?

On paper, there exists a second technological gap between Dreamcast and PlayStation2, the latter clearly boasting superior specs. Ironically, though, it has been the Japanese debut of PlayStation2 that has highlighted the Dreamcast's capabilities; Sega, seeking credibility, is seeing it conferred by an unusual source. *Soul Calibur*, as readers tell **Edge** over and over, does not just play better than *Tekken Tag Tournament* and *Street Fighter EX2*, it is technically better. It may be the case that PlayStation2 is more powerful than Dreamcast to the power of 'X', but who, exactly, has the ability or resources to exploit that additional horsepower right now?

In many respects, Sega has – no matter how inadvertently you may consider it – stolen Sony's thunder. The leap from sprite-oriented 16bit machines to poly-pushing 32bits was pronounced; this current transition less so. Bar a few high-profile titles, the two things that separate the majority of next-generation games from their predecessors are pretty, yet elementary: higher frame rates and better resolutions. At present there are few industry practitioners who have the imagination or resources to truly put the extra processing power to any other use.

Dreamcast's launch software in Japan, as risible as certain titles may have been to play, was

impressive; the games were smooth, with crisp resolutions. Sony's machine, following more than a year later, has had less impact as a consequence. For the past year, there has been a legion of pundits and hardcore gamers willing, at the slightest provocation, to espouse the inconceivable, incredible merits of PlayStation2. The reality, however impressive in principle, has been mundane to date.

However, as much as Sega may enjoy this minor PR coup, it will have to fight much harder to win subsequent battles. The first batch of PlayStation2 titles may be underwhelming, but the format's potential remains huge. More importantly, it has the backing of almost every major industry player. And, with Microsoft and Nintendo currently making firm plans for their new machines, Sega will find it harder than ever to acquire the only thing that will assure it of a significant market share: great games.

//The PC/DC current//

The fortunes of Dreamcast are symbiotically linked with those of the PC CD-ROM software market. As the conversion process from PC to DC is relatively painless and can easily be delegated to low-profile, low-rent teams, internal or external, almost every major publisher has a back catalogue of software ready, in effect, to release. Apologists perceive this as a masterstroke, while critics – however sympathetic to Sega they may be – regard it as giving licence for publishers to dump half-rate, or at least unrefined, PC ports on to shelves at little cost.

In truth, the ease with which prime PC titles can be converted to Dreamcast could still be the making of Sega's machine. Unlike Sony, which commands support to rival that enjoyed by Nintendo in its NES heyday, Sega must prove itself. With the N64, a number of publishers adopted a 'wait and see' policy – and a quick glance at the quality (and quantity) of thirdparty releases over the years demonstrates the impact that caution had on the fortunes of the N64. But, unlike that machine, the Dreamcast doesn't have a highly 'individual' architecture. If a PC version of a major title exists, there can be a DC iteration. It is an easy machine to develop for. Even codeshops working directly to the metal – bypassing the oft-derided *WinCE* OS – claim that Sega's console is an eminently approachable format.

Having titles like *Black & White*, *Half-Life* and *Quake III: Arena* in its portfolio should greatly benefit Sega. The PC market has grown immeasurably in sophistication (although not in retail performance) over recent years. Being able to tap into a ready source of quality titles is a considerable bonus. Whether PC games will suit the





***Soul Calibur* (left) is the game that underlined both the power of DC hardware and Sega's eagerness to get quality on to the platform. But will *Chu Chu Rocket* (below) serve to validate its big move online?**

somewhat limited palate of the 'mainstream' gamer remains to be seen, but who would confidently bet against the likes of *Galleon*, *Hidden & Dangerous* or *Grand Prix 3* causing a stir?

In the eyes of the industry, though, conversions don't represent true commitment. Although few would dispute the quality of firstparty projects like *Shenmue* or *Sonic Adventure*, Sega needs top-notch thirdparty titles programmed specifically for Dreamcast. It needs its own *Metal Gear Solid* or *ISS Pro Evolution* – games that practically enjoin the attention of gamers, irrespective of the console that they actually own. The company needs pillar titles from high-profile sources of the calibre of Namco, Capcom and Konami to wholeheartedly pledge their support. To have a publishing behemoth like Electronic Arts state to the industry – months after a successful launch, and with continued achievement Stateside – that it is still 'evaluating the platform' is a huge blow to Sega's legitimacy as a console heavyweight. In *Soul Calibur*, it can claim to have the best fighting game on any format, but it needs more than that.

Moreover, Sega must make every effort to ensure that its cornerstone online strategy captures the imagination of the paying public. The basic Dreamcast package is far from unattractive. For a £200 outlay – sure to fall later this year, despite chief executive Jean-François Cecillon's current intimation to the contrary – a consumer receives an

Internet-ready machine at a fraction of the cost of an iMac or mid-range PC. Although unspectacular (and occasionally unwieldy), the Dreamcast's browser software is relatively easy to use, especially when compared to the intractable, potentially incomprehensible vagaries of a *Windows*-based PC. But do consumers know that? And isn't there a real danger that the massmarket views (and will continue to regard) the Dreamcast as a toy, rather than a tool?

Sega is backing the Internet, Sony the burgeoning DVD format. Both tactics have their merits and drawbacks. The key issue for Sega, though, is how console gamers will regard online gaming. There is no doubt that the failure to provide software with engaging online functionality from day one has been an embarrassment. To make an area of interactive entertainment that remains the domain of the hardcore gamer a key aspect of the Dreamcast manifesto and to then fail to deliver has been a PR disaster.

//The complications of life online//

There is the possibility, of course, that Sega is backing the right horse, but in the wrong race. Online gaming is fraught with complications. **Edge** has no doubt that Sega's network will be secure and, compared to PC-based online gaming, fast and relatively easy to use. But there are more pressing, endemic issues. A 33K modem – or, for that matter, the 56K model available in the US – is regarded by many as being insufficient for action games. It's a widely

//Lies, damned lies and sales statistics//

Since its impressive debut, sales of Dreamcast consoles have been disappointingly low. Despite calls from retail for the company to reduce its £200 RRP – and aggressive discounting tactics by online stores keen to build user bases – Sega UK remains tight-lipped about any plans it may have to adopt a mainstream-friendly price point. The arrival of PS2 will surely herald a £50 drop, but could that, given recent performance, be too little, too late?

	Oct '99	Nov '99	Dec '99	Jan '00	Feb '00	Mar '00	April '00	May '00	Total sales	Avg sales per month
//PlayStation//	115,830	253,047	506,325	99,803	87,267	78,278	64,673	46,622	1,251,845	156,480 units
//N64//	10,767	23,933	54,427	13,900	6,627	6,135	10,990	9,205	135,984	16,998 units
//Dreamcast//	101,083	48,133	87,222	12,650	8,527	9,198	7,898	5,752	280,463	35,057 units
//GB Pocket//	20,766	44,089	82,986	10,667	10,423	18,562	17,458	12,055	217,006	27,125 units
//GB Color//	42,243	115,770	238,915	41,218	47,747	63,637	61,213	58,898	669,641	83,705 units

held belief that the massmarket has embraced gaming as it has moved away from the abstractions of old. As technology has improved, games have become more believable, polished, approachable. What, then, would this audience make of *Quake III: Arena* figures lurching from point to point during an online deathmatch? Or a racing game where cars jerk from one point on the track to another in the blink of an eye?

There are financial issues, too. Although the Dreamcast's Internet connectivity is essentially 'free', local calls aren't. Daytime play is prohibitively expensive to all but the hardcore. Off-peak play, though, is rather more affordable. Conceptually, it compares favourably with other recreational activities on a pound-for-pound ratio – renting a video, going to a club, and so forth. Only a fool would argue that gamers will embrace this philosophy, however. Should (and can) Sega join the current stampede to offer subscription-based 'free' online access or gaming? In Europe, that would mean sacrificing the cut of call revenue it currently receives – and there's no guarantee that partner BT will play ball on this issue before the end of 2000. Besides, to impress the mainstream audience with its pioneering online gaming, Sega needs a killer app – and *Chu Chu Rocket*, despite its charms, is unlikely to be it.

Telephone-using habits in the UK still differ from those in the States. As execrable as BT's 'ET' series of ads may be, the underlying message of its domestic-oriented narrative is rather more subtle: it's okay to use the telephone, whispers the telecommunications giant. There are still many homes with a single telephone, second lines remain the exception, rather than the rule, and the cost of calls is still perceived as expensive. So where can the market that Sega is targeting be found? Will gamers still living at home with their parents be allowed to dominate the home phone line? Is it likely that the average parent will pay the premium to BT for a second line and the additional quarterly rental fee? Will 20-somethings in shared, rented accommodation do likewise? Prior to the arrival of broadband technology, these issues matter. There is a danger that cries of 'get off the bloody phone' will drown out Sega's invitation to play online.

Adding to these questions, what of Sega's understandable desire to capitalise on the ecommerce potential of Dreamcast? At present, Dream Arena (the fixed online portal where all Dreamcast users begin after dial-up) offers precious little content and features. Prior to its forthcoming relaunch, it is eminently unexciting. Sega's belief that it can compete with other portals and the cream of ecommerce is bound to elicit cynicism from both sides of the commercial fence. Few would doubt the company's ability to flog videogame-related paraphernalia, but beyond that, Sega's expertise is unproven. A careful choice of partners in such a venture would help, but it is debatable that there are enough customers au fait with online shopping at present to support healthy balance sheets – having two pockets to fill may have a deleterious effect on Sega's ability to be competitive. As a long-term objective, ecommerce is both desirable and practical. But it won't become a pillar of Sega Europe's business overnight.

//Set-top box status//

It has long been apparent that the successors to the PlayStation, Saturn and N64 would harbour aspirations of set-top box status. In the gaming marketplace, 'multimedia' is a Ratner-esque faux pas; a virtual epithet that hardware manufacturers are loathe to speak. The irony is that claims that once seemed far-fetched when uttered by Phillips, 3DO and Commodore are practically at the point of fruition with a new class of machines. From DVD to basic Internet access, telecommunications gadgetry to – inevitably – digital TV, the conceptual has become the concrete.

So, yes: Dreamcast can go online, could work admirably well as a set-top box and can be more than a simple games console. But could it be that Sega has forgotten the wisdom behind the Trojan Horse premise? As Cecillon asserts in his **Edge** interview (see p76), Sega Europe is not obsessed with market share. But if its online gaming and other Internet-related strategies are to flourish, the company needs a broader consumer base. The arrival of *Resident Evil: Code Veronica* saw an upsurge in Dreamcast software sales. Such high-profile titles are vital. The launch of Sega's online gaming strategy this year will hardly harm the Dreamcast's fortunes. But there are no guarantees that the wider market will pay or, indeed, play – while late, the service could, paradoxically, be too early.

Sega claims that a quarter of a million European users have registered for the Dream Arena service. This figure begs the question: why have the remaining 500,000-plus European Dreamcast owners not yet registered? Signing up for Dream Arena is something that users do the very first time they connect to Sega's service. How many of the 250,000 are connecting regularly? Even the PC market in Europe still lacks a subscription-based online game with a regular user base in six figures. Is there any evidence to suggest that Dreamcast owners will embrace online gaming more readily?

It may sound obvious, but games are the key to Dreamcast's future. The software industry is surprisingly political. Sony, the master of spin, commands a high level of approval from the development community. Conversely, Sega's stock is not high. Its hardcore exponents are vociferous, but are outnumbered by those who bang the PlayStation drum. While the Dreamcast hardware brings approval, PlayStation2 inspires excitement.

In terms of developer and publisher support, Sony holds the aces. Nintendo's firstparty software is the best in the world, while X-Box – still an ethereal amalgam of tech specs, corporate bluster and whimsical punditry – has the weight of the Microsoft empire behind it. Sega, granted, is not without its resources, but even competing head to head with Sony is an enormous trial. How, then, will it cope with the Dolphin and X-Box snapping at its heels? Sega must recapture the guerilla mentality that typified its powerful assault on Nintendo's pre-eminence during the 16bit era. It must organize a strategy to take its online gaming ideal to the masses. Dreamcast must be established as a genuine force throughout the rest of 2000. Next year will probably be too late.

//The Dreamcast can go online, could work admirably well as a set-top box and can be more than a simple games console... but the company needs a broader consumer base//

//The money snapshot//

With the launch of PlayStation2 imminent, Sega's biggest battle could be to retain its current 'favoured position' in terms of shelf space. Don't laugh: it's a relevant point. While PC and PlayStation software/hardware currently dominates retail space, Dreamcast – as a new, exciting format – currently receives a greater proportion of shop floor than its revenue would afford it if it were an older, established machine. With the N64 enjoying an Indian summer (with the success of *Pokémon Stadium* and *Perfect Dark*), and PlayStation2 mere months away, Sega has to work fast to convince the retail trade that Dreamcast will become ever more profitable.

//Performance of major console formats in 2000 to time of writing//

Total PS sales from Jan '00 to May '00: 376,643

Total N64 sales from Jan '00 to May '00: 46,857

Total DC sales from Jan '00 to May '00: 44,025

Total GBP sales from Jan '00 to May '00: 69,165

Total GBC sales from Jan '00 to May '00: 272,713

As a simple (yet illuminating) exercise, **Edge** offers the following scenario:

If every individual to have bought a Dreamcast, PlayStation or N64 this year has also invested an additional £100 in software and peripherals, how much in the way of revenue have these 'new' users contributed to the industry as a whole?

PlayStation sales revenue
Hypothetical £100 per new user: £37,664,300
Unit sales revenue (based on £80 RRP): £30,131,440
Total revenue to all involved industry parties as a whole: £67,795,740

Nintendo 64 sales revenue
Hypothetical £100 per new user: £4,685,700
N64 hardware sales (based on £80 RRP): £3,748,560
Total revenue to all involved industry parties as a whole: £8,434,260

Dreamcast sales revenue
Hypothetical £100 per new user: £4,402,500
DC hardware sales (based on £200 RRP): £8,805,000
Total revenue to all involved industry parties as a whole: £13,207,500

Of course, this is an elementary exercise, and in no way, shape or form should be construed as hard fact. There are many things it simply doesn't take into account. But it does lend credence to the accepted wisdom that Sony is where the money is at. Sega will have to fight tooth and nail to retain its current high-profile presence within retail this Christmas...

//Sega in the eyes of the industry//

Back in the days of the Saturn the development community complained of Sega's attitude, decamping to Sony's new way of doing things. **Edge** polled a selection of industry figures in order to get an idea of how Sega is now perceived

There are some great sports and arcade style games for this system, like *Soul Calibur*, *NFL2K* and *Crazy Taxi*. Unfortunately, the newer machines like PS2 and X-Box are more in line with our particular needs and experience – so for in-house we're developing for those instead

Mark Rein, vice president, Epic Games

With the power of the Dreamcast, for the price of a Dreamcast, it would seem foolish to ignore it. However, the games-playing public may be tempted by the raw power of the newer consoles alone – we are in their hands, and can only produce the best products we can

Martyn Chudley, managing director, Bizarre Creations

Sega have made the same mistake again – getting their technology to the market first, but having a definitive lack of killer titles to back it up

Chris Gray, lead programmer, Headfirst Productions

The Dreamcast is on a technical par with the PlayStation2. What Sega needs is an inspired advertising assault to go up against Sony

Daniel Leyden, programmer, DMA Design

The Dreamcast is dead, it just doesn't know it yet

Billy Thomson, level designer, DMA Design

Sega seems to have lost its way. They had a great head start but they've blown their lead. They don't return phone calls or emails, and they don't market their games properly. **It's sad... that they almost had a chance, but now I fear their chance has gone**

Jez San, chief executive officer, Argonaut Games plc

Sega need some big exclusive titles and they need them fast. *Shenmue* seems to be the only one on the horizon and that won't be enough

Demis Hassabis, MD and lead designer, Elixir Studios

The Dreamcast is to games what the arcades were to entertainment

Rik Alexander, [illegible]

A year ago I had written off Dreamcast. This Christmas I pencilled it back in after playing *NFL2K* and *Soul Calibur*. Who knows by 2001? But I think it's got at least a couple of good years

Chris Roberts, chief executive officer, Digital Anvil

With the massmarket acceptance of consoles, loyalty is not an issue: Dreamcast will be dropped by the **public as soon as they can get hold of PS2 and X-Box**

Chris Satchell, technical manager, Silicon Dreams

The only chance Sega have is online gaming and nothing I've seen so far suggests they know this

Joe McDonagh, designer, Elixir Studios

Dreamcast is a far more developer-friendly platform than PS2 and that fact will have profound long-term impact on the quality and quantity of games for the two platforms

Toby Gard, creative director, Confounding Factor

I like the Dreamcast, but then I like Sega full stop. I believe both Sega and Nintendo produce good, playable games whereas Sony seem to be more impressed with quantity rather than quality

Darren Drabwell, senior producer, Silicon Dreams

The latest in a long, long line of small technological marvels which we struggle to come to terms with before it becomes obsolete

Ken Fee, lead artist, DMA Design

The Dreamcast is a machine that has loads of potential; it's easy for us to develop games, it's fast enough to make those games look good, and development kits aren't too expensive

Jason Kingsley, chief executive officer and creative director, Rebellion

The Dreamcast is a great machine and it has a significant head start over the other consoles, but online gaming will be the key to Dreamcast's success. The X-Box might actually help Dreamcast...

Chris Kingsley, CTO (aka technical director), Rebellion

Dreamcast is a success, but now needs to use every marketing and pricing weapon at its disposal to press home its advantage

Brian Woodhouse, producer, Bizarre Creations

Right now, Sega needs the Dreamcast even more than the gamers need it. Maybe they should buy some Microsoft shares if they want to have the cash to fight in the console behemoth bloodbath that is going to happen in 2001

David Perry, president, Shiny Entertainment

The Dreamcast is, well, fine. It's small, it's neat, it has a funky triangular orange light and corners that look like they've been ironed... oh, and some good games too

Richard Rolfe, game designer, DMA Design

Now, we know that there is no big tech gap between DC and PS2, but the DC is easier to program and will be always cheaper than the PS2

Frederick Raynal, creative director, No Cliché

Who cares? Go outside and get some fresh air

Jared Carr, [illegible]

Multiplayer network capability is the biggest advance in gaming since polygon graphics; I'm sure Sega can demonstrate this with the Dreamcast this year

Mark Craig, senior programmer, Bizarre Creations

Not the stop-gap measure that most people thought, but an excellent and powerful machine in its own right

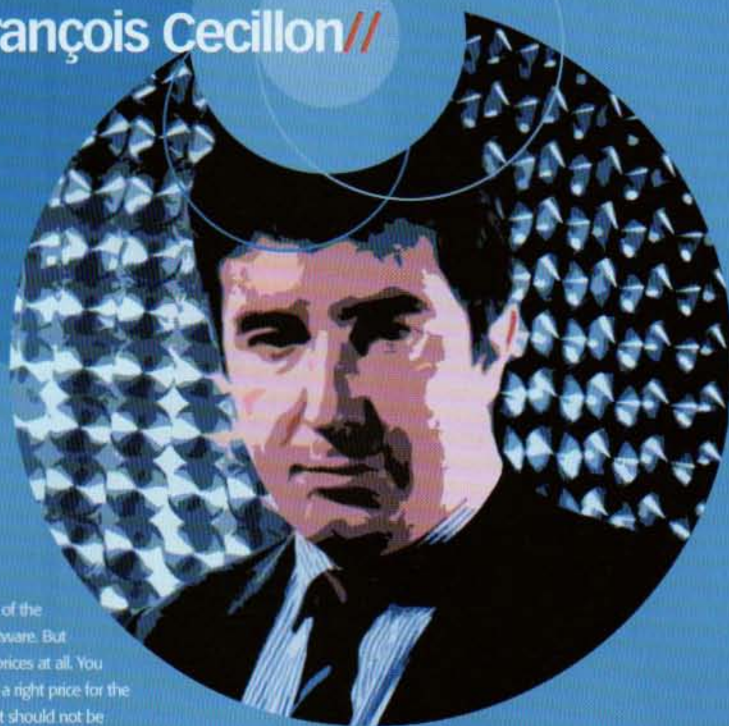
Donald Robertson, artist, DMA Design

Dreamcast is here and now, it is perceived as a next-gen console by the public, but needs to capitalise on its potential as an online games machine with the ability to set the trend that others will follow

Gavin Cheshire, managing director, Silicon Dreams

//Sega Europe CEO Jean-François Cecillon//

Dreamcast has been on sale in Europe for nine months, during which time it has enjoyed the privileged position of being the sole next-gen console on the domestic market. All that is set to end on October 26, when Sony lets PlayStation2 out of the traps, so **Edge** asked Sega Europe CEO **Jean-François Cecillon** to reflect on how he feels the company has performed to date, and to outline his strategy for the battle ahead.



Edge: While there has obviously been an upturn in people's opinion of Sega since the Saturn era, would you agree that there is still work to be done on how people perceive the company?

Jean François Cecillon: Yes, there's always very much work to be done in that respect. Once you pass beyond the first stage of [attracting] the people who believe in you whatever happens, then you go to the second level – hardcore gamers, who are the ones who kind of believe in you but then they want you to show them that they are right to do so. So we've reached the first two stages. There are roughly – for Sega – a bit under one million [gamers] in Europe. I guess that we reached enough of them, 80 or 90 per cent.

The next step is to expand the community to the people who like games, who like the gaming activity, but are not hardcore gamers. They need to be convinced by a bit more than just one or two good games. They want to understand that you are developing the machine, in real terms, to its full potential. You need to reassure them, to explain to them how to use it, what to do with it and why they should purchase it. They want to know that you will still be here for the next season, for the season after next and so on. They don't just want that, they need to be helped – and that's what we are doing now.

We are launching our first online game and taking a very special approach to it, actually. We have decided to give it away to all the Dreamcast owners: all the ones who are registered on Dream Arena already – more than a quarter of a million in Europe – to the other half a million Dreamcast owners who haven't registered yet, and to new owners up until the end of August. It's a real spring/summer campaign, backed up by what, for Sega, is a huge marketing investment. We are spending roughly ten million euros in Europe to back up this campaign. So, that will give us an opportunity to enlarge the community of Dreamcast owners in Europe.

The next step is to go to a different category of people who want to buy the best-selling game but at a reduced price. Then, come September, we have to think what do we do with the price of the machine and the software. But I'm not a fan of low prices at all. You know, I think there is a right price for the right product and that should not be re-evaluated or reassessed every three or four months. I guess it's better to do what we're doing now, which is to basically band those products, accessories, peripherals or anything else in the future to the machine, and keep a certain price point. We don't want to go always, every three months, for market share, market share, market share.

Now, the community extension which we are looking to catch from September and October are those guys who will buy *Sonic*, but not for £40. These guys, the usual good gamers, most of them want to buy two or three games for less than £100. They don't want to pay more than that. We need to address this and to address it well. To build the community, we have some fantastic new games in September and October.

Finally, we will consolidate with the online community. There is not an exception between the core gamers and the online community. They are not separate people. Very often they are the same guys, and there's a strong intersection. But there are also some new people who are coming online for entertainment activity, where offline gaming is not what they are looking for. There are also some new people who understand the Internet, email, chat rooms – so Dreamcast is a proposition which suits, whereas buying software and playing offline on their TV was never something that actually interested them. So we can see a different community.

So, in answer to your question, community management – in the pure sense of it, not mercantile management but just how to manage a community so that these communities stick with you – is obviously something that is always in our minds.

//The power of Chu//

Edge: So *Chu Chu Rocket* is, in effect, a Trojan Horse – a foot in the door for Sega's online gaming strategy? Do you believe that the gamer who plays *Chu Chu Rocket* online will, as a consequence, be better disposed towards spending £40 on *Quake III Arena* or *Black & White*?

JFC: Yes, it's something like this but philosophically it's...

Edge: ... giving something back?

JFC: Yes. This is the first time ever that a console, a games console, is offering online gaming in the major markets of Europe. It's the very, very first time, so we should never overestimate people's ability to immediately understand what we have been working on for the last two years. So it's a new thing, a new terminology, a new activity. If we were to tell these guys: 'You buy a console for £199, and then you buy a game for £40, and then you're going to buy a modem and this and that...' No, it's not like that for us. For £199 you get a console, you also get a good game free, a modem free, you have a browser free, and you have the access free, and if that is not enough, then...

I think that you need to make it very easy for people. To play, you take the game, put it in, do this, do that, you play – you access the online community. So it's very easy for people because you know people have five minutes in their life for your proposition. If that's not right, if it's too complicated, or there are server problems, they take panic and they take flight. We want to make it work.

This is the reason we are giving *Chu Chu Rocket* away for free. If we do the right job now, there will still be some hiccups and some problems with new technologies. When you're pioneering a new technology or a new activity, you know there are always problems, several problems, but there will even be problems we can't conceive today. You know what? We're going to fix them, and then we're going to evolve and we're going to carry on developing these technologies and these activities.

Of course, the bigger games, or rather the more weighty games, like *Quake* or *Black & White*, those sort of games won't be free. But we're trying to find out a system which is just not: 'Go to the store, buy it for £40, play'. There must be a system which is a

bit smarter than this to strengthen the feeling of community for online games.

//Paying to play//

Edge: So, in effect, you are considering 'pay to play'?

JFC: We are considering every option today, absolutely every option. Pay for play, subscriptions on a monthly or daily basis. I consider every option today to make it accessible to consumers when we launch something new.

Edge: There are those who have suggested that, with its commitment to online gaming and Internet-related activities, Sega might be attempting to woo a market that does not really exist just yet in a mainstream sense. Could it be that you are preaching to the converted? That the mainstream is not ready for online gaming and, more pressingly, vice versa – that online gaming is not yet sophisticated enough to beguile Joe Public?

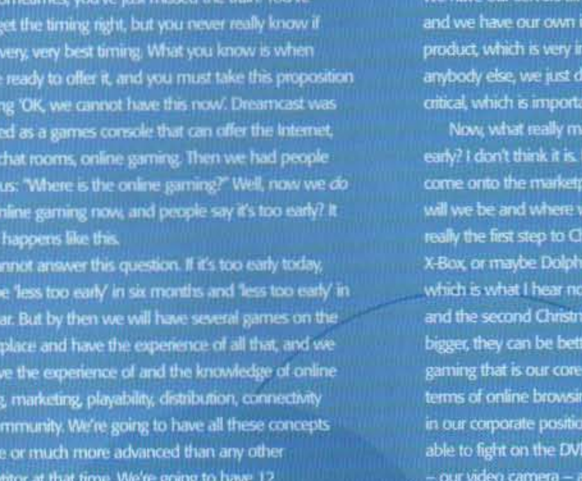
JFC: There's always, in every new thing that you do, there's always a danger that people reject it, or it's too early. Sometimes, you've just missed the train. You've got to get the timing right, but you never really know if it's the very, very best timing. What you know is when you are ready to offer it, and you must take this proposition by saying 'OK, we cannot have this now'. Dreamcast was launched as a games console that can offer the Internet, email, chat rooms, online gaming. Then we had people asking us: "Where is the online gaming?" Well, now we do have online gaming now, and people say it's too early? It always happens like this.

I cannot answer this question. If it's too early today, it will be 'less too early' in six months and 'less too early' in one year. But by then we will have several games on the marketplace and have the experience of all that, and we will have the experience of and the knowledge of online gaming, marketing, playability, distribution, connectivity and community. We're going to have all these concepts in place or much more advanced than any other competitor at that time. We're going to have 12 months of pioneering over them.

Do you know what the definition of a pioneer is in America? In America, they say: 'A pioneer is a guy taking the arrows in his back'. The ones who follow, they just walk on in and carry on, so it's never the first one that discovers something. In that sense, PC developers are the pioneers of online gaming, now we are coming with the console. We have our servers all in place, we have our own games, and we have our own independence in delivering our product, which is very important. We don't depend on anybody else, we just depend on ourselves, which is critical, which is important for security.

Now, what really matters is the continuity. Today is very early? I don't think it is. It doesn't really matter. Today, we come onto the marketplace. Let's see: in 18 months where will we be and where will our competitors be? So, this is really the first step to Christmas 2001 when we might have X-Box, or maybe Dolphin – but perhaps not until 2002, which is what I hear now. So it will be our third Christmas, and the second Christmas for PlayStation2. They can be bigger, they can be better – it doesn't matter. It is online gaming that is our core proposition, in terms of eservices, in terms of online browsing, we will be well equipped to fight in our corporate position. At the same time, we won't be able to fight on the DVD side. But we will have Dream Eye – our video camera – and we'll have MP3, and other

> //We are migrating from being **an offline gaming company** to being **an online gaming company**. We are at that stage. You know, **2001 is our first test.** If we pass that one successfully, **we are sorted**//



accessories. Dreamcast will be involved in set-top box operations somewhere down the road, because everyone talks about Dreamcast as a set-top box, they're talking about PlayStation2 as a set-top box – well, this is logic.

I think we are well equipped to fulfil our potential in our marketplace. Our priority is interactive entertainment.

We are migrating from being an offline gaming company to being an online gaming company. We are at that stage. You know, 2001 is our first test. If we pass that one successfully, we are sorted.

Edge: For online gaming to appeal to the masses, there needs to be a big change in the way it is paid for. Metered calls, after all, are not conducive to lengthy play sessions.

JFC: I agree. It is a critical point. It's something that might stop certain people going for online gaming today – and I understand that. We have addressed this issue with BT – as you know, our pan-European partner – and we have discussed setting up special schemes. It is absolutely unfair for people to pay for something they don't see. It's psychological for the consumer. You don't want to pay for the telephone charge, the amount it costs today. It's ridiculous. It's anti-massmarket, it's anti-economic... it's just a short-term, greedy gain. BT are at the forefront of broadband development, which I think is very good, and we are obviously involved.

People will know that for £30-£50 a month we're going to have some special games. You want to play this game? Click here: £2. You want to play that game for half an hour? £1.25. You want to do this? It's pay-per-play, 'x' per minute. You want a monthly subscription? It's £12.50, £25. They know how much they will spend, and they know how much they will get for that. Today, with the various charges – peak time, night time, Sundays, Mondays – it's set up just to confuse everybody. For us it's going to be: 'This is what you pay, period. Now enjoy your night'.

//Development hell?//

Edge: As part of this feature, **Edge** has polled people within the development community on their opinions of Dreamcast. Jez San laments Sega's attitude towards developers, and expresses the opinion that the format had a chance, and that chance has gone. How do you feel about that?

JFC: When someone of that quality, of that importance in the business, says such statements I'm sure he has very good reasons. He's a guy I very much respect, because he's proved to everyone that he can make it, so I have no more to say about that. I'd rather speak to him about it face to face and answer directly, rather than going through **Edge**. Well, we both respect the magazine, and both he and I read it, but I'd rather reply face to face.

Edge: But isn't it still the case that Sega's stock within the development community is not as high as that of Sony? Sega and Nintendo were accused – with the Saturn and N64 respectively – of keeping the 'best' tools for 'own brand' products and favoured developers. Sony gave everything to its licensees. How have you been addressing the fact that certain quarters of the industry are better disposed towards Sony than Sega?

JFC: That isn't happening with Dreamcast – it is very easy to develop for. They have all the tools that we have. When Sony developed the PlayStation they didn't have in-house teams, so they needed the third parties, and to work well with them to get the games. They actually did very well. Now, maybe Sega was arrogant with the Saturn – I have no reason to disbelieve that – but with the Dreamcast, there was no arrogance. The development process is much easier on Dreamcast than it is on PlayStation2. As far as we are concerned, we have been very open and very accessible with developers.

Edge: Will the continued absence of certain key gaming franchises hurt Dreamcast in the long term?

JFC: There are two things we don't have and I regret it very much – *Final Fantasy* and *FIFA*. It was nothing to do with the European operations of EA or Square or Sega Europe. I have no comment to make about who might have made those decisions but, in Europe, we have fantastic relationships. And I know they would love to work with us.

Edge: *FIFA*, though criticised by hardcore gamers, is a brand that the mainstream has truly embraced. It's noteworthy that Konami's vastly superior *ISS* series, lacking an official licence, can barely compete in Europe. Football games are important in the European market. What is Sega doing to address the non-appearance of *FIFA*?

JFC: We started research in January and we spoke to hundreds of people, fans and players, and we came up with a 'best football game in the world' concept. We've given it to our studios in Japan and we're working on it. But I can't say any more than that.

Edge: Opinions have been expressed that Sega's problems in Japan and Europe…

JFC: In Europe? I have never heard that. I spoke to three journalists last week who asked about how did I feel about the troubles in Japan, given our success in Europe.

//Market share? Who cares//

Edge: Sega's showing at E3 was, even in the opinion of pro-Sony, Microsoft and Nintendo quarters, rather impressive. The quality of certain titles was unquestionable. Even so, many observers, professional or otherwise, are expressing the view that PlayStation2 will arrive this autumn, and vastly outperform Dreamcast.

JFC: They won't. I'm trying to get Sega Europe out of this infernal logic. Look, I'm not here to say: "Look! More market share!" I'm absolutely totally uninterested by this. It's better for Sega to find its own market. Its market might be half a million year one, two million year two, three million year three, eight million year five, and then collapse. I'm not here for that.

Offline gaming business is not what we are here for. We are here for offline gaming, but we are also here to develop online gaming and the Internet side of the business. That will take a few years. Dream Arena is not a subsidiary of Sega Europe, it's a whole new company. It's another Sega Europe, if you like, which will fly on wings and develop its own business. This is so important for us.

I'll tell you another thing: I have a huge respect for Sony, but their performance is not as good as expected. Is *Tekken Tag* better than *Soul Calibur*? No, it's not better. Are they going to have enough units to do a million in Europe day one? No, they are not. How many are they going to get in the UK before Christmas? Maybe 150,000 or 200,000. In Europe, they'll have no more than 750,000 to 800,000 before Christmas. And that's no better than we did last year. Are they going to go online? No, not yet. Will they have DVD? Yes. Will they have more marketing money? Yes, five times more than Sega. I'm not here flex my muscles. It's not what the issue is. The issue is: what is my market? I have to know this if I'm going to capture every consumer in this market and make it valuable. If I get 25 per cent of the market, or rather, I don't get 75 per cent, I don't care. It's not about market share. That's not what I'm here for.

I'm here to develop new businesses and find new consumers. Now, we have *Sega GT*, *MSR* and *Virtua Tennis* coming out in September, which is fantastic. Of course, they are amazing games. They're not like triple-A… they're quadruple-A. This will demonstrate that the 128bit Dreamcast is as good as the other one, the PS2. On this one there's a draw. In terms of units, we're going to get more than them because we're in year two and they are just launching.

But what matters for Sony is the long term. They want to shift 60 million PlayStation2s worldwide over the next three or four years. That's their long term. To promote their DVDs, their video, their music – this is their strategy. This is what matters to them. The market for us today is not simply the gaming market; the competition today is not PlayStation2 versus Dreamcast. For us, it's AOL, it's Freeserve, it's any portal which is going for entertainment.



//The market for us today is **not simply the gaming market;** the competition today is **not PlayStation2 versus Dreamcast.** For us, it's AOL, it's Freeserve, it's any portal **which is going for entertainment**//

You can't settle for one market any more. You can't just throw stuff at the wall and what sticks, sticks any more. You've got to make sure that this sticks on this wall, that sticks on that wall, and this is why I'm totally cool about it all. We react, we resolve and we move on.

Edge: But wouldn't you agree that 'offline' software is still tremendously important? And that it is, in effect, Sega's foot in the door – that the online aspects of Dreamcast won't take off if the market doesn't appreciate the oneplayer software?

JFC: Of course it is. Content has always been what makes Sega great.

//Selling dream games//

Edge: But at the moment Sega's performance in the software charts is not fantastic, is it? [At the time of writing, ChartTrack's weekly breakdown of 'software by format' sales put Dreamcast behind the N64 – itself lagging behind the Game Boy and, up front, the PlayStation.]

JFC: It's an issue of installed base. The charts? I don't care. When we have several million – no, it's not the issue – so, what do I do? Spend £100,000 more on television this weekend? Who reads the charts? Twelve guys! Why do I want to spend money to please them? I'm spending money to develop my marketplace.

The market is moving. I move with the market. If I can shift 50,000 units, but I lose a million pounds, I'm not going to do that – why should I? This is my attitude, as otherwise in the first two years you become suicidal.

Edge: Making ecommerce an integral part of your strategy – via Dream Arena – is completely understandable, but isn't there a danger that a large part of your market simply won't be able to use it? Dreamcast owners under the age of 18, for example, will not have the requisite credit card.

JFC: There are ways. I understand that a large part of the market, the Christmas market, is under 18 – a huge part of the market – but every business finds a way to reach them. We will. There are ways.

Edge: One problem online portals have to struggle with is how to position their content in an editorial sense. The language of the hardcore gamer, after all, is not that of the auntie going online to buy a Christmas present.

JFC: I don't think we are marketing from seven to 77 years old. Maybe in five years, but not today. Sega is such a heavy brand to carry: Sega has such a history. Sega is this cutting-edge thing. I don't want to be doing like this brand, that brand – it is Sega. It's not like Sony.

I don't know. Nintendo is very kids-oriented. For my kids, I've had to spend a fortune on *Pokémon*. You can tell my colleagues in Nintendo Europe that I spend a fortune. My kids are mad on *Pokémon*, they have a roomful of *Pokémon*. Great job. But it's not Sega. It could be Sega, but it could be another company doing that sort of stuff. But in terms of bringing content to Dream Arena, I'm not sure that my market is seven to 77. We're going to be using the Sega brand, but I don't think that going full speed all over the place is the right thing to do.

The resources that I have are not unlimited. I'm not going to throw away millions of pounds this Christmas on getting aunties to visit. And I don't think they are going to visit just yet, anyway.

Edge: Arsenal, the Premiership team that you sponsor, was runner-up in two competitions last season. Would you be satisfied with a similar performance for Dreamcast?

JFC: Second out of 20, you are happy; second out of four – there were never four before. I might be third or fourth for online gaming, which I really doubt I will be, actually. If I'm second to PlayStation offline and second to AOL in Internet access, second to EA in online gaming… if I'm second in four or five markets, am I a loser or a deputy winner?

Edge: And, finally, what of X-Box?

JFC: I think Microsoft are now contemplating the reality which is the business model of the offline gaming industry as we knew it. But it has changed in terms of its economic structure. That is where they are now – and they won't launch before 2002.

Their success will depend on the market they want to reach. I have established my market – I know where I want to go. And we have competitors everywhere. It's a fact of life.

//Epilogue: reasons to be cheerful//

Despite its obvious woes in Japan, the looming spectre of the PlayStation2 launch in the west, and the unproven nature of its Internet strategy, Sega has reason to look to the future with optimism. Over the next nine months it has an eclectic release schedule, packed with software that can be described as the envy of any publisher. Diverse, consummately professional in terms of execution, and remarkably innovative in a few choice instances, it is no coincidence that Sega's line-up was received with near-universal acclaim at E3.

In *F355 Challenge* and *Metropolis Street Racer* it has two forthcoming racing games of undeniable potential. Whereas the platform game and beat 'em up genres were the staples of 16bit gaming, the advent of 32bit poly-pushing technology finally allowed the driving genre to fulfil its potential in a domestic environment. Sega's Dreamcast, like the N64 before it, has suffered the ignominy of an après-launch dearth of top racing titles. While Video System's *F1WGP* port is not without its charm, *Sega Rally 2* was old before its launch. With the PlayStation offering titles such as *Rally Championship*, *Colin McRae Rally*, *TOCA* and *Gran Turismo*, Sega has not yet had the opportunity to impress upon the public the difference high frame rates, draw distances and resolutions can make. Now it can – and must.

Another significant challenge for Sega is how it can market unique titles like *Seaman*, *Jet Grind Radio* and – to a lesser extent – *Space Channel 5*. After the Dreamcast's launch, it is rumoured that Sega expected *Soul Calibur* to be its biggest pre-*Shenmue* hit. Despite having a finger on the pulse where software is concerned, Sega was reportedly nonplussed – but certainly not displeased – when *Seaman* earned that particular accolade with more than half a million sales in Japan.

The continuing success of *Pokémon* software and a brief (but lucrative) flirtation with Tamagotchi hardware suggest that there is a real market in the west for the 'nurturing' genre. How capably Sega can introduce the quirky, offbeat *Seaman* to comparatively conservative UK gamers remains to be seen. Its androgynous appeal could help Sega woo the perennially under-represented, under-exploited female market.

//Software market share//

Given that the N64 has an installed user base of 1.55 million users in the UK, and that the PlayStation is knocking on the door of six million owners, the Dreamcast's 280,463 installed units (as at the end of May) puts it at a disadvantage whenever retail charts are published. Individually, Dreamcast titles have struggled to make a dent in ChartTrack's All Formats Top 20 (the chart below relates percentage of market share by platform, by month), with a few notable exceptions – *Code: Veronica* being the most recent. That said, Dreamcast's share of total software sales is hardly terrible. If the company can use its exciting autumn/winter line-up to full effect, the future, for both hardware and software sales, could look markedly brighter.

	Oct '99	Nov '99	Dec '99	Jan '00	Feb '00	Mar '00	April '00	May '00
//PlayStation//	63	69.1	66.9	70.2	70.4	63.4	62.5	60.4
//N64//	7.5	7.4	11.9	9.9	6.6	6.2	11.9	7.8
//GB Color//	3.1	4.5	6.4	6.5	5.6	7.5	7.2	10.3
//Dreamcast//	17	10.4	8.5	10.3	7.6	9.9	6.7	8.2

Space Channel 5, similarly, is capable of turning 'mainstream' heads. Granted, it is short and has limited appeal as a singleplayer title, but the game is a real showpiece for the versatility of the Dreamcast, and one that might help lure much-coveted 20-somethings (the slice of the market upon which, of course, Sega's embryonic Internet strategy will rely). The question is: can Sega successfully promote the game in the UK, given that Sony failed with the similarly charming *PaRappa*? If Sega is to succeed, a discount RRP and widespread media coverage are a must.

//There is no disputing that certain aspects of Sega's pre-launch planning speak of subtle genius. The Naomi arcade board and the ease of conversion from the PC are dual masterstrokes//

Jet Grind Radio, on the other hand, is a title of more tangible potency. With its wonderfully distinct appearance and styling, it is eye candy of the sweetest kind. Widespread reporting within the specialist press of it as '...a cross between *Tony Hawk's Skateboarding* and *Crazy Taxi*' do not do it justice. If any of Sega's Holy Trinity of unconventional 'hip' titles will capture the imagination of the gaming public, *Jet Grind Radio* is the one. But, again, Sega must be prepared to loosen its purse strings if a wider market is to know, let alone care, about its merits.

Another feather in Sega's cap is that its handful of top-rank PC ports are poised to arrive later this year. *Quake III: Arena*, obviously, is a bedrock of its plans for online gaming. It will be equally suitable and desirable – on the proviso the questionable AI routines of its PC incarnation are revised – as a oneplayer title. But can Sega's standard 33.6K modem do it justice in Europe? Opinions differ. It is possible that the disparities between online play and a smooth, oneplayer mode could leave gamers feeling cold towards the former. As with *Black & White*, it is certain that Sega will be better served by presenting both titles as fantastic games that can, if players so wish, be played online. To punt them as online games that have a oneplayer dimension could prove disastrous.

There is no disputing the fact that certain aspects of Sega's pre-launch planning speak of subtle genius. The Naomi arcade board and the ease of conversions between Dreamcast and PC represent a dual masterstroke. Both are (and will be) ready sources of pillar titles. Irrespective of their origins, who would gainsay the likes of *Half-Life*, *Dead or Alive 2* and *Power Stone 2*?

Sega has the games. That is beyond question. But does the wider market know that?

TESTSCREEN

The definitive monthly assessment of the world's latest videogames

Bright lights, dull city

The days of bedroom or garage coders spending days Sellotaped to their chairs, eyelids propped open with matchsticks and fingers stapled to the keyboard all for the love of getting a few white blocks moving around a cathode-ray tube are all but gone. To some, videogaming nowadays is all about money, passion having fallen by the wayside.

The more videogames permeate the massmarket, the bigger the financial implications and the wider the tactics employed by those looking to relieve you of your gaming funds. Everyone is out there looking for a sure thing – their own *FIFA*, something that can be tweaked and trundled out year upon year with guaranteed returns from witless punters.

Fortunately, the likes of Codemasters, Rare, and Nintendo (for example) seem to have an unerring abilitiy to deliver cash cows that just happen to be wrapped up in great gameplay packages, too. These publishers aren't simply playing the numbers game.

But the problem with a massmarket approach isn't simply a case of shop shelves stacked to the roof with games sporting numbers after their titles, it's also a question of choice. More specifically, originality is the issue. Take *Mr. Driller* (see p90). Of all the games reviewed this month, Namco's cute little puzzler is the finest by a country mile. But will its quality be translated into supernova success at retail? Well, probably not here in Europe. (It has been an enormous hit in its native Japan, but then the marked difference between these two markets does not need pointing out.) It's a similar situation with *Fantavision*, **Edge**'s first (and arguably only) choice on PlayStation2, a game that is as refreshing as it is enjoyable. But has it made the top three best-selling PS2 titles to date? No.

While a company such as SCEI is in a financial position to be able to allow its internal development teams to come up with original ideas such as *PaRappa the Rapper*, *Ape Escape* and the forthcoming *TVDJ* (formerly *Be On Edge*), other publishers will look at the poor performance (in the west, at least) of these titles and be further discouraged to stray away from the safety of the licence/sequel formula.

A few years ago, an Infogrames developer told **Edge** that the money his company made every Christmas from the release of semi-developed games boasting Smurfs, Asterix and Lucky Luke licences allowed riskier, yet original, projects such as *Outcast* to be given the green light. However, at the rate publishers appear to shying away from original concepts, soon gamers may simply end up stuck with the former.





From left: *Fantavision, Mario Party* and *Messiah* – enjoyable titles the like of which may become extinct due to limited sales and a lack of willingness among publishers to hedge bets on originality

Every issue, **Edge** evaluates the best, most interesting, hyped, innovative or promising games on a scale of ten, where five naturally represents the middle value. A game receiving a 'seven out of ten', for example, is a very competent title with noticeable flaws but which should still appeal to a considerable range of players. It does, after all, score two points above average and should therefore not be considered as such.

Edge's rating system is fair, progressive and balanced. An average game deserves an average mark – not, as many believe, seven out of ten.

Videogames on the Edge

This month, Edge has been mostly playing...



Tony Hawk's 2 (PS) Activision
Hawkster fever hit this month as a preview build featuring extensive play options arrived in the post. The quest for the highest-scoring round continues.



TOCA WTC (PS) Codemasters
Another preview – though almost complete – disc to have kept people away from their desks as *TOCA*'s best game to date proved hugely addictive stuff.



Metal Gear Solid (GBC) Konami
An excellent conversion maintains the best bits of the series, but of course with added portability. As with all GBC games, good eyesight is an advantage.



Perfect Dark (N64) Rare
Rare's phenomenal FPS continues to impress, and the N64 is lapping up the attention. Multiplayer is this month's preferred play mode for the **Edge** team.

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VAMPIRE



When the action moves to a contemporary setting, Christof and his coterie of vampires benefit from an arsenal that includes chainsaws and machetes





Combat is badly paced, the action happening too fast to make full use of vampiric powers, or indeed to control wayward members of the party







Storyteller mode (top) enables players to design chronicles, but still emphasises hack and slash. Hopefully creative players will get closer to the spirit of the World of Darkness

Vampire: The Masquerade' is a popular pen-and-paper RPG that places emphasis on character development and strong narrative. As a result, Nihilistic's interpretation had been widely anticipated, thanks to the strong licence and the promise of a unique, rewarding multiplayer experience. Ultimately, though, the game fails to do the franchise justice, and can't compete with the sophisticated likes of *Baldur's Gate*.

The oneplayer game opens in the 12th century, with the player adopting the role of Christof Romuald, a crusading knight. Although at first the character is a devout human, it isn't long before he is embraced by the ranks of the undead, commencing a convoluted narrative that encompasses medieval Prague and Vienna, modern-day London and New York, unrequited love, and Christof's attempt to come to terms with the loss of his religion.

The first thing players will notice after some quite stunning graphics are a number of historical inaccuracies and a lazy use of stereotypes that make it difficult for the player to suspend disbelief. The irony of a medieval 'knight' speaking with an American accent punctuated with 'thou haths', lamenting the fact that he hasn't heard a French accent for some time, is clearly lost on Nihilistic. And when the plot moves the action to London, the player is greeted with a 'stoik 'n' kidnee pai' cockney that hasn't seen the light of day since Mary Poppins.

On first impressions the game's interface appears to be both intuitive and fluid, but this is quickly dispelled as soon as combat commences. The mainstay of Christof's undead powers is his ability to use several 'disciplines' that convey a number of special effects, ranging from increased speed and power to distance attacks and the ability to 'charm' opponents. During the heat of battle, it is next to impossible to use these effectively, or to use items from the character's inventory, resulting in reductive point-and-click combat. And when Christof's coterie of undead bloodsuckers is joined by other vampires, combat becomes even more of a lottery. The AI of these members simply beggars belief. Each discipline costs a certain amount of blood to activate, and when vampires run out of blood, the chance that they will lose control and go berserk steadily increases. This does not, however, deter your fellow coterie members from rapidly using up their





Format:	**PC**
Publisher:	**Activision**
Developer:	**Nihilistic**
Price:	**£40**
Release:	**Out now**

***Vampire* suffers from trying too hard to capture the subtle nuances of White Wolf's World of Darkness, resulting in a plot that is impenetrable to non-fans**



During the game, experience can be spent on improving attributes and learning disciplines, including Fireball and other distance attacks

precious reserves of plasma to overcome a succession of minor opponents, leaving them vulnerable against superior challengers. Combined with the fact that the game can only be saved at certain points that are few and far between, this becomes a significant design flaw.

Enemy AI is also worthy of mention, but again, for all the wrong reasons. Bad guys remain stationary until a coterie member is close enough to activate them, though in general they can be seen far in advance of this. In theory this would, of course, make it impossible to be ambushed, but in practice coterie members recklessly charge down corridors, with the effect that the party is swiftly overrun by the sheer numerical superiority of adversaries.

Although this list of design abuses sounds comprehensive, perhaps the biggest fault of the game is in the overall structure, which repeatedly deprives the player of any degree of choice. At three or four key moments during the long cut-scenes that are scattered throughout the game Christof is offered a choice of dialogue, though this is purely cosmetic and doesn't have any effect on gameplay. The upshot is always that Christof is dispatched to some location or other, consisting of three or four levels in which the object is to kill all enemies and pick up items and cash. There is very rarely more than one choice of which location to go to, as most areas are inaccessible until a cut-scene opens them up, as is the case with the New York sewers that are mysteriously 'locked' until a certain NPC has been spoken to. There is no degree of choice over who joins Christof's coterie, and there are literally no puzzles in the game.

The oneplayer game opens **in the 12th century, with the player adopting the role of** a crusading knight, although it isn't long before he is **embraced by the ranks of the undead**

This litany of misjudgements results in nothing more than an abject failure to convey the spirit of the pen-and-paper original. The dramatic discourse between the desire to retain a shred of humanity and the need to feed on the blood of innocents is not well represented in the game, and nor is the suspense created by the impending arrival of sunrise. In fact there is only one – pre-scripted – example of the arrival of daytime in the game after Christof's embrace, and predictably it is a challenge just to ensure that coterie members do not wander out of the shadows, oblivious to the danger.

It is to be hoped that Vampire's multiplayer framework will enable online storytellers to remedy Nihilistic's naïve game design, but this will require a considerable amount of creativity, because the tools that are provided to create multiplayer chronicles bear too many of the faults of the oneplayer game.

A missed opportunity.

Edge rating:

Four out of ten



Equipment can be purchased during the game, though with the amount of items that can be found there is little need to shell out

LEGEND OF MANA







Solve the Tiny Sorcerers sub-quest and you'll enlist the pink-haired Pumpkin twins as apprentices. If the AI wasn't so poor, this might have been worthwhile



Build up your power bar to unleash special techniques like this Orbital Blade, then watch *Mana*'s ever-cute critters run for cover

When Square Europe announced that *Chrono Cross*, *Legend of Mana* and *Dew Prism* were not scheduled for European release, you could stand anywhere on the coast and hear booing in several different languages. To be fair, though, there's no reason for Square to expect any of these titles to sell better than the troubled *SaGa Frontier 2*. Not even *Legend of Mana – Seiken Densetsu 4*.

Many players still have fond recollections of *Seiken Densetsu 2*, aka *Secret of Mana*, the 1993 SNES action RPG that introduced Square's craftsmanship to a wider audience. *Seiken Densetsu 3* was eagerly anticipated, but never appeared outside Japan. Now, seven years on, and taken at face value, *Legend of Mana* will likely do nothing but disappoint fans. All the trappings look familiar, from the weapons techniques to the bouncing Rabites, but this isn't really a *Mana* game.

For starters, Square has lost the plot – literally. There is no central narrative, with the entire storyline of the game structured around discovering and completing some 67 sub-plots and side-stories. Occasionally you'll get glimpses of the bigger picture, but the overall goal of reviving the Mana Tree remains vague. While there's arguably plenty to do, this particular experiment doesn't pay off. It's very easy to lose track of where you're supposed to be, and there's little dramatic impetus to drive you on when things start to drag. *LoM*'s fantasy world can still ooze charm, localisation aside, but an overdose of whimsy in the cute characterisation also warns you that moments of dark, emotional string-pulling aren't on the cards.

The world itself has to be built from scratch in a new Land Make system. Successful completion of

Square has lost the plot – literally. There is no central narrative narrative, with the entire storyline **of the game structured around discovering and completing** some 67 sub-plots and side-stories



Although it retains *Seiken Densetsu 3*'s Capcom-esque megabosses, the challenge is non-existent. Any reward for clever play is seriously undermined



Format: **PlayStation**

Publisher: **Square America**

Developer: **SquareSoft**

Price: **$40 (£27)**

Release: **Out now (US)**



The unfortunately named holiday resort of Polpota puts up a vibrant, technicolour argument in support of the quality of 'trad' 2D graphics

a quest will usually earn you an artefact, and dropping this on the world map creates a new realm to visit. This is more important than it seems at first, as the placement determines the difficulty level of the creatures therein, but it deals another blow to any persistent gameworld.

Let's admit that *SoM*'s combat was largely derivative of *Zelda III*, offering both an overhead forced-perspective view and a range of attacks based on holding down the buttons to charge up your weapon. *LoM* has been reduced to a more primitive side-on view where you only attack left and right, and plays remarkably like a scrolling beat 'em up in that you can press single or combined buttons for instant moves, or just whack away for preset combos to build up your Special meter. The moves can be fun, but the tiny characters scrum together in such a tight space, with so many effects shooting off, that it can be hard to tell who's getting the hits in. Movement on the z-axis – in and out of the screen – is also a problem, as the game requires perfect alignment for those lunges and thrusts to connect. A second player may grab a pad and join in when NPCs or pet monsters are in tow, but the inability to customise them reinforces *LoM* as a solo venture, unlike previous *Mana* games.

Other casualties of poor implementation include some terrible AI, with your partners opting for inaction as the most popular combat move. *SoM*'s Ring Menu interface – one of the finest console GUIs ever devised, no less – has been wastefully subsumed into some unintuitive page-based nonsense.

Even the usual HP/MP system has been dropped. Instead of roaming free, the monsters attack in fixed, *Chrono Trigger*-style episodes. Enemies explode in a generous shower of food, coins and EXP gems à la *Power Stone* when defeated, whereupon your energy bar is entirely restored for the next fight. If the lack of challenge strikes you as patronising, wait until you see the infinite continues for beating bosses.

The experiments don't stop there. Your home base includes: a monster corral, for raising fighting pets from eggs; an orchard, for growing magical veg; a smithy, for forging your own weapons; and even a laboratory, for building and programming a 'golem' robot buddy. But the complexity of these combination games asks for a considerable investment of effort that doesn't match the rewards, and you aren't penalised for ignoring them. Indeed, *Legend of Mana*'s problem is that its new ideas are mere indulgences with niche appeal: the majority of the fun quotient resides in exploring them, and finding all the secrets can turn into a game in itself. But for the fans, this won't make up for the elements Square has dropped.

On a sad note, it's odd to consider that *Legend of Mana* may signal the end of an age for high-quality 2D graphics, for a time at least. Its delicious backdrops and visual gags serve as a reminder that 3D is as much a style as it is a medium, and the technology has a long way to go before it can capture the intricate exaggerations afforded by the traditional animation and hand-drawn artistry on show here.

Edge rating:

Six out of ten







Freeform exploration has given way to levels, mini-quests and a DIY world map generated by using the new Land Make system

CHASE THE EXPRESS







Bosses (above left) are few and far between, and the only shooting in the meantime involves picking off terrorists, who often spawn from nowhere



Advancing adversaries are often announced by a mini cut-scene, meaning you can prepare to roll out and shoot them down

Like action movies, action videogames have the opportunity tap into the deep seam of unreconstructed, adrenalised macho bull that made stars of Arnie and Sly, and countless millions of dollars for Hollywood. That same blend of animal cunning, physical ability and happy recourse to firepower worked its magic on the *Syphon Filter* series, which seemed to be a hit before anyone deigned to notice it had been released, and at first glance *Chase The Express* looks to want to so the same.

The plot is what action fans would rate as promisingly lowbrow, with the concept of terrorists hijacking a train containing vital information/weapons/VIPs more than a little reminiscent of the deeply obvious *Under Siege 2*. The player controls NATO lieutenant Jack Morton, who, as the last surviving good-guy soldier on the Blue Harvest train travelling from St Petersburg to Paris, must take on the massed ranks of the Knights of the Apocalypse cell, save the French ambassador to Russia and his family, and – as it later emerges – prevent the European Union states being reduced to a nuclear wasteland.

This is all well and good, but once you get hold of the controls you realise that there is no way the hero is going to impress with his manly ways. The analogue stick which lent Gabe Logan such fluidity of movement flops flaccid and useless in the joypad, developer Sugar & Rockets having opted for the D-pad forward/back, wheel-to-the-left/right approach. When he does walk, run, roll, duck or turn through 180°, the hero seems to float inches off the floor.

However, it's when the combat starts that you really begin to suspect the developer had no intention whatsoever of putting together an action romp. The targeting system is straight out of survival horror, with the player having no recourse to firstperson finesse. As a result Morton often has to be edged from side to side in a firefight to get the terrorists in his sights. Distressingly, the fixed cameras have a tendency to place his adversaries just out of shot, requiring

Rather than taking advantage of the obviously claustrophobic setting of a train, *Chase The Express* **subjects the player to endless hours of traipsing** along soon-familiar corridors



While the interior of the train features some impressive detail, not enough is made of the setting, begging the question of why it was selected at all









While there are some interesting set-pieces, like a 'puzzle' that require the combination of a crossbow and rope to solve, or a gas chamber (above right), for the most part the game consists of fighting through carriages

Format: **PlayStation**

Publisher: **SCEE**

Developer: **Sugar & Rockets**

Price: **£35**

Release: **Out now**

a quick sprint into a hail of bullets to stand a chance. In keeping with the survival horror theme, ammo is scarce and the inventory system is less forgiving than Rambo on the rampage – leading to Morton suffering the ignominy of having to slip off to the gents (which serves as a save point/resource store) when things start hotting up.

Which, sadly, is a rare occurrence. Rather than taking advantage of the obviously claustrophobic setting of a train, developing a similarly tense atmosphere to *Resident Evil* or *Silent Hill*, *Chase The Express* subjects the player to endless traipsing along soon-familiar corridors – made all the more infuriating by long loading times between carriages, and shifting cameras. There are even occasions when mini cut-scenes trumpet the arrival of a patrolling terrorist.

The problems that are presented aren't solved by the ruthless application of violence, but more often than not thanks to a pass key, a slip of paper or a computer disc. The only time the player needs to summon any real degree of aggression is against the four bosses in the game, confrontations that merely serve to underline the limitations of the control system. This results in a longing for levels to be capped by stand-out sub-games that offer you the opportunity to gun down helicopters or try your hand at driving a train, rather than still more uninspiring gunplay. This feeling soon leads to the terrorist presence on the train seeming like more of an irritation than the driving force behind the action.

Compounding this, there are several possible endings besides Morton catching a bullet – some of which can hinge on as little as neglecting to pick up a single memo. While the concept of the way you play affecting the way the game will end is a worthy one, and the theme of thinking about other people's needs is, interestingly, key to success in *Chase The Express*, this sits uncomfortably with such a straightforward storyline, which already has myriad 'twists' built into it. In this case, given the fundamental problems with the gameplay, you're just glad it's all over.

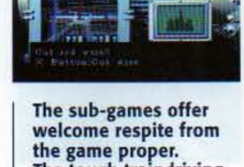
One plus is that this will come around sooner rather than later, with the game taking little more than six hours to complete. While this was perceived as a problem with *Metal Gear Solid*, it seems unlikely anyone will get involved enough in *Chase The Express* to care.

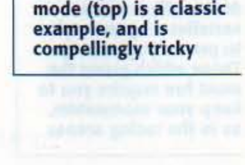


It's rare you get the chance to get your hands on real firepower

Edge rating:

Three out of ten





The sub-games offer welcome respite from the game proper. The tough traindriving mode (top) is a classic example, and is compellingly tricky

MOHO







Pressing the block and attack buttons simultaneously causes this impressive 'swirl' manoeuvre. It can only be used when the red 'rage' gauge flashes







MoHo **offers seven varieties of game styles to prevent monotony. Those which prove the most fun require you to keep your momentum, as in the racing arenas**

When confronted with a product deemed wildly inventive, Tom Hanks' character in 'Big' looks puzzled, holds up his hand and questions the item's interest to a child: "I just don't get it," he confesses to the gathering of corporate bigwigs. A similar question might be asked of *MoHo*. It isn't that the gameplay mechanic or overall concept is difficult to understand – although screenshots fail to communicate these aspects – more that the frustrations in the fundamental design weren't identified at an earlier stage.

Lost Toys' first title is admiral for its bold approach, but in the attempt to introduce something new in look and style a misjudgement seems to have been made at the drawing-board stage. Time restrictions or coding difficulties haven't resulted in a poor representation of the early blueprints – the overall look and feel of the game is praiseworthy and seems close to the original concept. Rather, it is the game mechanics which fail to inspire that crucial element of fun. The problem is mainly that the player must repeatedly attempt short levels. Not only is this infuriating, it also causes the game to lose rhythm.



The combat for the most part is sluggish. Once an enemy unleashes an attack it is difficult to break free, and blocking proves too inconsistent

The game takes place in futuristic gladiatorial arenas controlled by an oppressive regime. Convicted of a heinous crime and punished by having his legs amputated, your character must win his freedom by completing each level within a strict time limit. This cleverly allows a well-implemented rollerball mechanism to power your character. Once the nine prisons – each comprising anywhere between four and ten arenas – have been completed, the final prison is unlocked.

Five characters are selectable at the outset, each having different



To keep that vital first-place position opponents can be elbowed aside. However, like many of the combat moves this proves almost random in its effect. Concentrating on your own course and direction is more rewarding



Format: **PlayStation**

Publisher: **Take 2**

Developer: **Lost Toys**

Price: **£30**

Release: **August**



skills and attributes to suit your style of play. One will be better equipped to do battle in the fighting arenas, while another will be more capable of negotiating the precarious platforms. The variety of game styles on offer is at least varied enough to prevent total exasperation. From Last Man Standing through to King of the Hill to a standard Race format, seven game styles are available, which helps delay the onset of monotony.

If all this sounds negative, then it should be made clear that there is a good deal of pleasure to be sucked out of *MoHo* if you're a fan of quick-fix twitch gaming. Arenas are generally short enough to complete within two minutes, and while some will infuriate by requiring up to 50 attempts, others can be completed on the first go. Achieving gold coins by finishing the level under a very strict time limit opens up bonus games, such as golf, and even an extra character – the evil doctor who is responsible for severing the legs of the contestants. An even more exacting time to beat (the Lost Toys team's own record) is there for those looking for more punishment.

MoHo's greatest attribute is the motion given to your character around the vibrant arenas. The movement is translated well, and once your gladiator picks up speed the momentum feels and responds to your commands incisively. Unfortunately, *MoHo*'s arenas are too short and there are too many obstacles (from spikes to laser cannons) to thwart your progress. Having to constantly attempt to recover momentum after being hit by a random missile coming from a location out of your view limits the potential joy such physics promise. Inertia games of the past, such as the delightful *Marble Madness* and the divine *Spindizzy*, kept such annoyances to a minimum by allowing a skilled player to keep the flow going through longer levels. Too many *MoHo* arenas, especially the Run The Gauntlet levels where ledges and platforms must be leaped across, actively require the player to stop and start in a punctuated fashion.

Some mention must go to the graphical effects, which impress throughout. The morphing of the landscape, an effect produced when explosions ripple the terrain, are not only visually glorious but both help and hinder the player at key moments. Previously unscaleable hills can be crested after surfing a landscape wave; an effect which adds greatly to the otherwise basic gameplay.

It is in the annoying old skool-style negotiation of ridiculously precarious platforms while being assailed by random missiles off screen that *MoHo* becomes too infuriating to bear. Like Josh Baskin in 'Big' contemplating a plastic skyscraper which inexplicably transforms into a human, players are invited to ask: "Well, where's the fun in that?"

Lost Toys' first title is **admirable for its bold approach, but in the attempt to introduce** something new in look and style a misjudgement seems to have **been made at the drawing board**

Edge rating:

Six out of ten





The twoplayer split-screen games do little to make up for *MoHo*'s shortcomings. It's just too difficult to see the path ahead of you

MR. DRILLER

Format: **PS (reviewed)/DC**
Publisher: **Namco**
Developer: **In-house**
Price: **$20 (£14)**
Release: **Out now (US)**
June 29 (Japan)






In the same way that *Mr. Driller* had arcade-goers gleefully feeding 50p pieces into the cabinet, the home version should see your couch time soar



The game's apparent simplicity – connecting like-coloured blocks brings reward – is its beauty





The PlayStation's hi-res mode is employed to present crisp graphics that stun the eye with their summer-day colours and strangely tactile flavour

Bouncing into place alongside classic Japanese puzzlers *Puzzle Bobble* and *Puyo Puyo*, Namco's coin-op curio *Mr. Driller* is a perfect illustration of why 2D gaming shouldn't be allowed to die. Of the eight action buttons present on a PlayStation joypad, this game uses one: steering a path down through stages of different size coloured blocks, you drill to clear a path.

As blocks are removed from the pile, those above tremor for a moment and then drop down – squashing you if you're underneath. If they pass another chunk of the same colour, they attach themselves to form a combined lump. When these lumps exceed four pieces or more, they disappear; the larger the block, the higher the points awarded.

Broken into depths of 500ft, the stages vary in style, some with many small blocks to others where huge chunks in two hues must be drilled before Driller plummets 50 or 60ft. All the while, the hero's air supply diminishes, requiring replenishment from oxygen capsules buried around the levels. These are trapped by ever-more-fiendish arrangements of 'X-blocks'. Attempt to bore through one of these and you'll be punished by losing as much air as a capsule gives.

So the compelling elements of *Mr. Driller* are the simple attractions of classic arcade gaming: speed, points, survival and dexterity. At first the obvious thing to do is plough down through the levels, aiming for the beginner's 2,500ft target (opting for the 5,000ft expert setting presents a far tougher challenge). While this target may be reached fairly easily, the corresponding score will be low. Clearing large sections of blocks, creating high-scoring connections, is where the game's real pleasure lies.

In addition to the arcade version's 2,500 and 5,000ft options, Time Attack and Survival modes feature for the home. Strangely, the obvious addition of a twoplayer race mode hasn't been made. That's a real shame, as it deprives *Mr. Driller* of the quality competitive play offered by Taito's seminal *Puzzle Bobble*.

Nevertheless, Namco has wrought a minor gameplay miracle with *Mr. Driller*. Comparisions with *Tetris* aren't really relevant – it lacks the underlying logical brilliance of that game. This is more a piece of classic Japanese 2D puzzling squeezed through a wormhole into the 21st Century. As with *Puzzle Bobble*, there is a near-mindless compulsion in *Mr. Driller*, placing the player in a tunnel-like gaming 'zone'. Drill, dodge, drill, drill, dodge...

Edge rating:

Eight out of ten

DRAGON VALOR





Format:	**PlayStation**
Publisher:	**SCEE**
Developer:	**Namco**
Price:	**£35**
Release:	**Out now**







It is only during the boss encounters that *Dragon Valor*'s combat becomes a little more involved, but it does adhere to a strictly hit-and-run brief. Unfortunately, by designating 'no movement' as the means of blocking, the designers effectively stifled any possibility of a simple combat system

The kindest way to describe *Dragon Valor* is 'comfortable'. Unspectacular and barely refined as it may be, its eminently familiar content makes it an easy title to play. But with similar games – new and old – making decent bids for your time, it's hard to justify investing in the few muted hours of entertainment this Namco release has to offer.

Best described as a hybrid of *Golden Axe*, *Ocarina of Time* and, to a lesser extent, inoffensive PlayStation platformer *Klonoa*, *Dragon Valor* is an action adventure with an episodic approach. Doling out action on a level-by-level basis, it is brazenly derivative, the gaming equivalent of déjà vu: you get the feeling that you've played it before, a decade ago, and it was better then. The features recognisably lifted from Miyamoto adventures only highlight its dearth of creativity – the attempt only serves to underline the game's flaws.



The puzzles are depressingly familiar. Oh, for some innovation

Dragon Valor's lack of ambition is galling considering its level-based design and fixed camera give license for any number of spectacular set-pieces. Realising that, you can't fail to find the indeterminate battles and elementary switch puzzles decidedly unsatisfying. Its combat sequences – which represent the lion's share of the action – are basic, by-the-numbers events. Admittedly, your character has a few move sequences and magical attacks to call upon, but in practice their existence is arbitrary. It soon becomes apparent that the most effective way to win battles is to use a simple three-press attack combo, retreat briefly to allow an opponent's period of après-kicking invulnerability to pass, and repeat ad nauseam. Very rarely is it necessary to experiment with this effective recipe.

Furthermore, the pace of *Dragon Valor* is awful. Each bite-sized area is a self-contained environment. Exit one locale and there is a distinct pause that can last as long as a few seconds before play resumes, which becomes enormously irritating. Its various traps and hazards, similarly, disrupt the flow of the action. There are too many devices – like falling pillars, and concealed spikes springing from floors – that demand that you pause for a patience-sapping moment in order to pass unscathed.

And what of its execrable plot sequences and below-average aesthetics? Feel free to discover these for yourself. *Dragon Valor*'s workmanlike use of genre mainstays gives it a fleeting value; hardcore gamers may find themselves briefly engrossed. But the emphasis must be placed on briefly.

Edge rating:

Three out of ten







You can't speed up the dialogue in the game, and as a result are likely to skip entire sequences, depriving the action of its narrative context

FRONT MISSION 3

Format: **PlayStation**

Publisher: **Square Europe**

Developer: **SquareSoft**

Price: **£35**

Release: **Out now**





Missions are now shorter, with fewer Wanzers involved in the action, but the two intertwining storylines can still offer as many as 40-60 hours of play each



The tactical reliability of skills such as Zoom and Stun is undermined by the random way that they are used, even by experienced pilots



A simulated 'Internet' enables you to send mail, read up on background history, or even download pirated military software

Clamber inside that armoured exoskeleton and you're the biggest kid on the block; as hard as steel, with auto-cannons for arms. It doesn't take a psychologist to grasp the allure of mecha, a factor that transforms *Front Mission 3* into something more enjoyable than your average tank battle wargame.

The essence of the game's turn-based strategy roleplay has changed little since the series debuted on Super Famicom in 1995. Once described as an isometric *Shining Force*, the move-and-fire gameplay now bears contemporary comparison with Konami's *Vandal Hearts*. A new Action Point system determines your ability to counter enemy attacks, and the price paid for *Front Mission 3*'s snappier skirmishes is that you're never given more than a handful of mechs to deploy on the battlefield.

The scenario focuses on the political instability of a new federal union in the Pacific Rim, with a credible near-future feel that's sadly undermined by some slow and often nonsensical plot development. The depiction of urban warzones is especially notable for its banality, perfectly underlining the extraordinary size and power of your Wanzer mechs by juxtaposing traffic cones, road signs and pleasingly destructible family hatchbacks. Once you escape the tutorials, the individual missions are sufficiently varied in objectives and special events that you can't help playing on to see what happens next.

So why is *Front Mission 3* still a disappointment? For some followers it would have to be the loss of industrial grittiness in favour of upbeat futurism, or the replacement of flashback-haunted mercenary characters with young, dislikeable college hotshots. Up to a third of your time can be spent in the configuration menus, customising your Wanzers, so others may regret the cartoon simplification of those lovingly detailed hardware lists that used to make mission-interlude shopping so addictive.

A criticism of the series as a whole is that after just a few hours of play you'll have seen all the tactical possibilities at your disposal. There's none of the learning progression of wargames that gradually release more sophisticated units and abilities, so it's simply a matter of grasping the basics and applying them over and over. Given Square's pitch that this is an 'introductory level' instalment, newcomers will also find the unintuitive interface to rely on fathomless nested menus, while the screen shouts at you with so many frightening statistics that curious novices will drop the pad as quickly as if it had winked at them.

It may not possess the sophistication of *FF Tactics* or the cult status of *Super Robot Taisen*, but *Front Mission 3* offers a more dedicated, playable form of console strategy than any recent PC port. Quite how the mech fights remain so watchable after 100 identical exchanges is both a conundrum and a testament to the game's obsessive core appeal.

Edge rating:

Six out of ten





One of the more convincing elements of the game is how realistic the cityscapes are, and how they lend your mecha a real sense of scale

SECRET OF MANA

As the American import of part four in the *Seiken Densetsu* series arrives in the **Edge** office for review (see p84), it's time to reflect upon the game that ignited the legend, a unique episode in the development of adventure gaming in the 16bit era











As in just about every game with RPG elements, developing the power of your weapons was a crucial gameplay element (above). In a neat twist, your attacking styles changed as you went



It may not scream glitz today, but in the early '90s *Secret of Mana* showcased some of the most beautiful graphics seen on a home format. Animation was slim, but detail strong

Final Fantasy II may have warmed American tastes to the subtle delights of Japanese RPGs in 1992, but it was 1993's *Secret Of Mana* that truly paved the way for the success of SquareSoft's adventure titles thereafter. Following *Zelda III*'s lead, the game offered a classically styled fantasy tale played out with action-led combat, although it bore more strategic elements than Nintendo's work, with tweakable party behaviour and an ample treasure chest full of different styles of armour, weapons and types of magic.

Uniquely, beyond these obvious riches lay a gameplay system which, with a multitap in place, allowed three players to participate simultaneously, taking the roles of the lead hero, his imp-like friend, and the heroine of the piece.

Throw in sparkling audio (the Japanese soundtrack CD release was huge in its day), a supremely effective 'ring'-based interface, and around 50 hours' worth of gameplay, and you have one of 16bit gaming's finest.













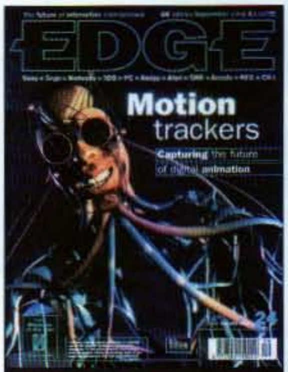


A sense of humour revealed itself when your characters needed to get from one part of the map to another in a hurry. Gratuitous use of Mode 7 scaling was a bonus

Manufacturer: SquareSoft | 1993 | SNES

EDGEVIEW

The videogame world never stands still, riding the breaking wave of advancing technology. In this regular column Edge puts the industry's progress in perspective with a look at yesteryear's headlines: five years ago this month



Edge issue 24, September 1995



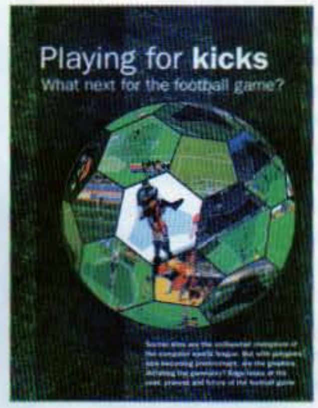
"How will we make the N64 a success?" asks NCL PR guru Hiroshi Imanishi. "Just like that"

Virtual reality was once the buzz term of choice to work **Edge** into a lather, but this month it was the turn of motion-capture, **E**24's cover showing off an abstract, somewhat sinister image in an effort to demonstrate advances in the field. Inside, an eight-page feature outlined the benefits such techniques could bring to gaming before allowing one industry bod to conclude, suggesting that its potential lay in bringing 'more of yourself into cyberspace' ('The Lawnmower Man' must have still been impacting some three years after release).

News this month included the appearance of the first wave of Virtual Boy software, including *Mario's Dream Tennis* ('a standard tennis game'), *Red Alarm* ('combines *Starfox* with *Tempest 2000*'), and *Galactic Pinball* ('one of the better Virtual Boy titles'). Despite the lacklustre nature of the system and its software, **Edge** attempted to extinguish consumer doubts with the well-chosen words: 'Remember, they said the Game Boy would never catch on'. However, the writer fails to mention who 'they' were.

Finally, **E**24's big interview was with Nintendo's PR manager. Hey, if Miyamoto-san's not available...









Clockwise from top left: SNES platformer *Yoshi's Island* is treated to a four-page preview; yes, that *is* a football game round-up you see in Edge; capturing motion capture; M2's graphics, CPU and CD controller chips

Did they really say that?

NCL's PR manager **Hiroshi Imanishi**: "Initially Nintendo will not be inviting thirdparties to produce [N64] games... Sony... pushed thirdparties to begin [producing] games before the [hardware] release... This is absurd"

Did Edge really say that?

'Nintendo's... commitment to 16bit gaming could prove to be a winning hand'

Testscreens (and ratings)

Terminal Velocity (PC; 8/10), *Super Sidekicks 3* (Neo-Geo CD; 6/10), *Ace Combat* (PlayStation; 5/10), *FX Fighter* (6/10), *Virtua Fighter Remix* (Saturn; 9/10), *Shin Shinobi Den* (Saturn; 4/10)

PIXELPERFECT

Every gamer has occasional moments of sparkling excitement, be it the first time *Speedball* booted up, or completing *Sabrewulf*. This month Wil Overton, an artist at Rare's HQ in Twycross, remembers a particularly daft slice of '80s gaming

While my best mate plumped for a proper(ish) keyboard and a grown-up(ish) version of *BASIC*, it was *Knight Lore* that initially swayed me to Uncle Clive's side during the great Commodore vs Sinclair war of the '80s. But it wasn't long before the lure of multicoloured sprites and multichannel music made defection seem like a mighty fine prospect and I lay the blame fairly and squarely at the feet of Andrew Braybrook.

Surprisingly, though, it wasn't the trademark bevel edges of *Uridium* or the finely honed originality of *Paradroid* that prised a second-hand C64 from another mate and kept me trapped in my bedroom for weeks, but the joy that was *Gribbly's Day Out*.

The premise was simple (as it always was in those days): zip the strange one-footed frog thing – Gribbly Grobbly – around the silky smooth, eight-way-scrolling level, avoiding the electrified barriers that would zap your psi energy while trying to pick up stranded Griblets and drop them off in a safe cave. Eight Griblets and the level was done; take too long and a particularly vicious black crab affair would come a huntin' and whup your hide. It was all devilishly hard thanks to Gribbly's inertia but oh so playable.

It's one of the only 'retro' games I love just as much now as I did in the days of programming looping rude messages on the displays in Dixons or crashing machines with a well-placed POKE. Well, that and Lee Braine's *Where's My Bones?*, but that's another story entirely.



Nintendo-head Wil Overton once filled his C64 gaming hours with *Gribbly's Day Out*





Sega cooks up fish and chips

Japan: Released on June 20 and costing ¥498,000 (approx £3,120), Sega's *Fish Life* is destined to become one of the more novel videogame-related conversation pieces – even in Japanese homes. Sporting a 15-inch TFT LCD display and using a speech-recognition system, *Fish Life* boasts the ability to be more versatile yet much less messy than the typical aquarium. Drawing patterns on the screen causes the fish to run after the shape, and merely 'touching' a fish causes its name to appear on the screen. It is even possible to speak commands to make the aquatic life dance. Sega hopes that the technology will be used in restaurants, libraries and, bizzarely, aquariums.



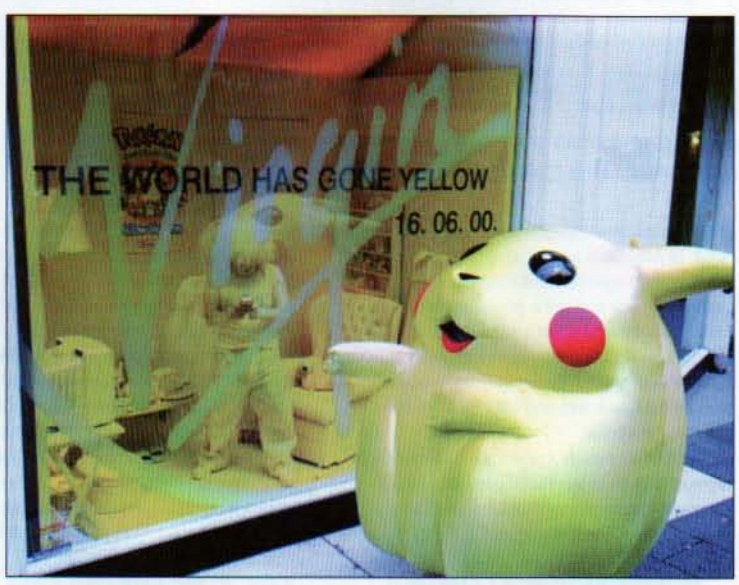




Sega has been demoing this type of technology at coin-op trade fairs in Japan for some time now, but *Fish Life* is a version aimed at the home that has everything

Pokémon invades Virgin territory

UK: Hot on the heels of selling more than one million copies in less than ten days in the US – making it the fastest-selling videogame ever – *Pokémon Yellow* was recently hailed in an odd fashion by Virgin Megastores, with the main window of its Oxford Street store given a yellow makeover in order to publicise the UK launch of the latest chapter in the phenomenon. Pokéfans were also treated to a sighting of Pikachu, as he unveiled the display at midday on the day of launch. **Stephen Lynn**, Virgin Megastore's marketing manager for games and mobile phones, said: "Judging from the success of today, we will be looking to do similar stunts and activity around other product launches." Here's looking forward to the inevitable sequel to *Soldier of Fortune*.



Pikachu puffs up with pride as it becomes clear that whatever *Pokémon* touches turns to gold

Professional gamers sought for cash reward

UK: The race is on to find Britain's finest, most skillful and charismatic gamer. (Well, the first two, anyway.) Independent competitions sponsored by Gameplay and Electronics Boutique will tap into the medium's increasing popularity and, it is hoped, spawn a new generation of 'professional' gamers.

Gameplay's N64, PlayStation and Dreamcast tournaments are for over-15s only, and boast cash prizes totalling £15,000. Regional heat winners at Cardiff (August 5), Glasgow (August 12), Leeds (August 19) and London (September 9) will win £250 and go on to the grand final in September. Telephone 020 7388 0004 or sign up at www.ukconsolechamps.com to take part.

Meanwhile, the SCGC 2000 (Scottish Computer Games Championship), based in Perth, runs over the weekend of July 28-30, and caters for both junior and senior age categories. Prizes include Sega Dreamcasts, games and vouchers from the sponsors. One of the UK's finest *Quake* players, Razza, will also be in attendance to take on challengers. Call 01738 813330 or consult www.infernal.co.uk for further information.



Gameplay's event, in its inaugural year, eschews the PC in favour of catering for gamers familiar with the N64, PlayStation and Dreamcast. But the rewards are great, and it is set to become the standard-bearer for gaming championships in the UK











SCGC 2000, sponsored by Electronics Boutique, is the event of choice for gamers living north of the border.

Art meets war meets videogaming

UK: Developed over the course of a two-year collaboration between provocative artists Blast Theory and the University of Nottingham's Computer Research Group, 'Desert Rain' is an art installation that combines elements of videogames and performance art to investigate the theme of media obfuscation during the Gulf War. Blast Theory's previous work, 'Kidnap', subjected two members of the public to 48-hour surveillance and posted the results live on the Internet, and was well received by critics and audiences alike.

'Desert Rain' is equally deserving of recognition. Up to six participants at a time enter cubicles in which a virtual landscape is projected on to a fine mist and are given 30 minutes to make contact with a target individual, communicating with the other participants by headset. The abstract landscape and the distortion of landscape by refraction contribute to a sense of disorientation, and after the event video footage depicts individuals relating conflicting views of the war.

For those who missed the production when it visited Bristol, London and Glasgow, there is still a chance to view the installation when it returns to Manchester at the end of September. More information can be found at www.blasttheory.co.uk

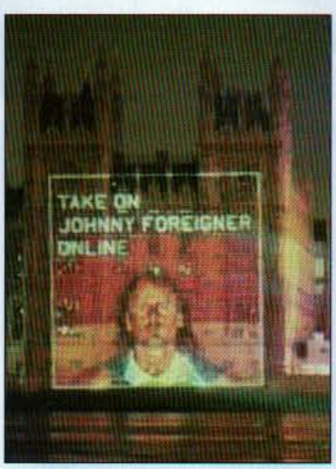




Teams of six must navigate their way through 'Desert Rain', attempting to locate a target before extricating themselves from the situation

Sega's Euro 2000 campaign proves hit and miss

UK: Though not quite generating the same level of hype as Gail Porter's behind, Sega's decision to project images taken from its recent Euro 2000 ads on to the Houses of Parliament at least shows commitment. The ads, showing 'comic' representations of national stereotypes, have not been met with enthusiasm from all quarters, however. The ITC advised Sega to alter one of the commericals, which features Germans eating sausages, driving VWs and sporting mullets. The tag line 'Come and have a go if you think you're hard enough' was considered insensitive given the violence at the competition. It has been replaced with 'Get ready to be – how you say? – sick as a parrot.'







Not content with simply recycling every hackneyed racial stereotype going, Sega's marketing bods delivered the coup de grâce – aping *FHM*

Valid reason to visit Millennium Dome found

UK: BT and technology company AvatarMe have provided gamers with a reason of sorts to visit the Millennium Dome. Visitors to BT's Talk Zone will be able to enter one of three AvatarBooths and generate a 3D image of themselves, which can then be downloaded from www.bt.com/talkzone or www.avatarme.com. Initially avatars will consist of 2,500 polygons, but from this month users will be able to download avatars that feature variable levels of detail – from 600 polygons up to 40,000.

BT envisages a wide range of uses for these avatars, from purchasing clothes over the Net to online dating, but the most rewarding will undoubtedly be multiplayer gaming. *Avatar* files can currently be converted for use in *Quake III: Arena* and *The Sims*, but AvatarMe plans to support a wide range of genres in the future, both by offering a conversion service on its site and by sending out dev kits that will enable games to be designed for use with the file format. The big advantage that this technology has over competitors like *Digimask* and *CyberExtruder* is that the whole body is captured, and, as **Edge** can testify, this makes all the difference.



The results AvatarMe can come up with can be shockingly realistic, as the Taurus model (above) attests. It's the full body that does it

Superheroes come to a street near you

US: Kitchen-sink dramas will soon be a thing of the past in Maxis' *The Sims*. X-Men skins can now be downloaded for use in the game and currently range from the popular Cyclops to the more obscure Deadpool. Created using *Photoshop*, the skins come courtesy of Jared Benson and can be located at http://members.home.net/skindex/main.htm. Although no special powers will actually be on display, the prospect of Magneto preparing sausages for the barbecue will surely be too tempting for some.









Shades of 'Stella Street' come to *The Sims* with superhero skins. But with avatar technology gearing up, surely you'll soon be able to play as yourself?

Videogames makes a stir on Broadway



The links between videogames and cinema encouraged Nottingham's Broadway cinema to host the Screenplay weekend, which it hopes will evolve into an annual event



UK: As part of Nottingham's archive film and television festival Out of Sight, the Broadway cinema in the city recently hosted Screenplay, a weekend devoted to the relationship between videogames and cinema technology. Attendees were able to play networked PC games courtesy of local company Lan Arena, as well as *Sega Rally* on a big screen, and there was an exhibition of retro gaming machines ranging from the Sinclair ZX81 to the BBC Micro.

The chief attraction, though, was 'New Worlds, New Spaces', a forum hosted by artist Frank Abbott. Several members of the videogame industry attended the debate to discuss the history and development of videogames, including Steven Poole, author of 'Trigger Happy', David Doak and Karl Hilton, respectively managing director and art director of Free Radical Design, and Paul Carruthers, MD of Climax's new Nottingham studio.

The forum featured some very informed discussion and well-conceived footage. Frank Abbot put together several montages, the highlights of which were a comparison of the pod-racing sequence from *Star Wars: Episode I* and the LucasArts videogame, and a piece comparing live-action footage of an individual viewing a painting in an art gallery with Lara Croft's ingame attempts to do the same.

Broadway has plans to develop Screenplay into a regular annual event.

Gaming takes to the piste

UK: Guillemot is to add to its array of console peripherals with the Thrustmaster Snowboard. A potential crowd pleaser after parties, the snowboard device will enable players to navigate the *1080°*-style virtual slopes of the future. Still undergoing adjustments – mainly to make it look more like a snowboard that a plastic-looking skateboard – expect the device, for the PlayStation and PS2, to make some impact.



No longer will home-surfing gamers have to take their chances aboard the ironing board

DataStream



Number of Nintendo Game Boys sold since 1988: **100,000,000**
Number of Game Boys sold every three seconds: **one**
Number of formats *Elite* coded for: **17**
Game which has most impressed Shigeru Miyamoto recently: ***Samba de Amigo***
Number of Dreamcast games Sega America president Peter Moore expects will be available by Christmas: **200**
Number of PS2 titles Ken Kutaragi claims are currently in development worldwide: **389**
Number of pre-orders Digicube has taken for *Final Fantasy IX*: **960,000**
Cost of each chair used by *Daikatana* programmers during the game's development: **$700**
Football teams signed up for Dreamcast sponsorship: **Arsenal, Saint Etienne, Sampdoria, Deporto de la Coruna**
Confirmed release date of US translation of *Shenmue*: **November 14**
Number of *Quake* skins generated by AvatarMe in first seven days after going live: **300**
Suggested retail price for PSone (not including tax): **¥15,000**
Weight of original PlayStation: **1.2kg**
Weight of redesigned PSone: **550g**



Badly Drawn Boy
Bewilderbeast
(XL)

An aptly titled debut from Damon Gough, the lo-fi troubadour who shrouds his delicate songs in an air of mild bemusement. His dazed approach and lack of affectation work in his favour, allowing the music to curl languidly around his yearning melodies. Raw, emotive songwriting is a rare currency nowadays, and Badly Drawn Boy is rolling in it.



Jurassic 5
Quality Control
(Interscope)

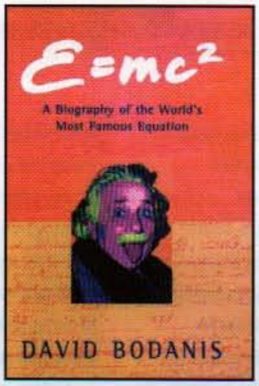
This West Coast rap sextet (you're right, they can't count) caused a stir with their 1998 eponymous mini-LP. 'Quality Control', their first full long-player, provides further antidote to the nihilism of Eminem and DMX without quite achieving the classic status the last record promised. Still, cuts like 'The Influence' and 'Jurass Finish First' spread the knowledge admirably, as well as revealing hip-hop's previously unacknowledged debt to '30s swing music.



23 Skidoo
23 Skidoo
(Virgin)

They may be far from household names, but 23 Skidoo's progressive electro experiments of the early '80s reverberate strongly in contemporary releases.

Sixteen years since their last record, 23 Skidoo bring events full circle with a new album which embraces everything from R&B to avant-jazz, without ever sounding musty or contrived. The strident guitars of 'Freezeframe' or the heady dub of 'Where You At' help shape an album which sounds as urgent as anything produced by the younger generation.



Author: **David Bodanis**
Publisher: **Macmillan**
ISBN: **0333780337**

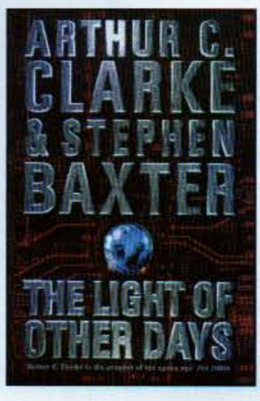
E=mc²

Unless you're a MathEngine boffin, or particularly masochistic, you probably avoid any contact with theoretical physics. But there's one equation that you've undoubtedly seen countless times.

E=mc² is as infamous a slogan for 'brilliant genius at work' as Lara is for 'gamer at play'. It means extraordinary, mind-boggling thoughts neatly summed up in five symbols. It means crazy old eastern European academics with bushy hair at the sides scribbling madly on blackboards knowingly. It means Hiroshima, Nagasaki, Chernobyl and the impossibility of warp speed.

Technically, it means sweet FA to anyone this side of a PhD in theoretical physics. Clever dicks will jump up say: "It means energy and mass are directly proportional to each other and that one converts to the other at the speed of light"... so what? This is what Bodanis sets out to explain.

This slim book clears the mist surrounding this profound equation. Rather than take on the whole of Einstein's theory of relativity, Bodanis sticks to E=mc². Aptly subtitled 'The Biography of an Equation', Bodanis recounts the history and people involved with its creation in lucid and clear style. Part thriller, part physics lesson and part history of the early 20th century, this satisfying little book will give you ample ammunition to bluff your way as a MathEngine boffin, if not as Einstein himself.



Author: **Arthur C Clarke & Stephen Baxter**
Publisher: **Voyager**
ISBN: **0002247046**

The Light Of Other Days

Arthur C Clarke and Stephen Baxter need little introduction. Described as literary father and son, they are two of the greatest names in modern science fiction and are responsible for writing epic novels that set the foundations of the genre for their respective generations.

Set around 40 years into the future, 'The Light Of Other Days' starts its epic space-time adventure in a world where Britain has suffered economic collapse, retreated from the EU, and gone whining to Uncle Sam, becoming the 52nd state of the US. Retinal implants are standard, and echoes of the Web remain – the voice-activated SearchEngine downloads directly to your brain.

Child of the flower-power generation Hiram Patterson lives here, and is the head of the media giant OurWorld. Patterson has unlocked the secrets of the sub-quantum universe and managed to produce wormholes that communicate across space and time instantaneously.

The consequences are predictably unpredictable: live realtime TV, the ability to see exactly what anyone has ever done, or will do, no more secrets. So many 'what ifs' are thrown at you there's barely room to follow the plot. Tell-tale traits of Baxter appear throughout in detailed explanations of the technologies, and wit and cynical snipes at the present – a hallmark of Arthur C Clarke – show through as the action develops. This is classic science fiction, and competent storytelling. Fans should fork out for the experience, but the rest of us might not withstand the force of the sci-fi double-whammy.



INTERNET
Site: Machinima
URL: www.machinima.com

Amateur film makers need not be frustrated by high production costs and the hassle of persuading friends and family to run around dark forests any longer. Machinima is an artform which blends the worlds of videogaming and drama to an inventive degree. The site offers advice, links, forums, trailers and mod files to help turn your favourite 3D engine into the new 'ER', 'Ally McBeal' or 'Friends'. Experience the 1997 classic 'Blahbalicious' for a taster. The sight of an army of *Quake* bots clashing on a heath to the sound of 'Braveheart' is simply amazing.

VIEWPOINT

EXPRESS YOURSELF IN **EDGE** – WRITE TO: LETTERS, **EDGE**, 30 MONMOUTH STREET, BATH BA1 2BW (email: **edge@futurenet.co.uk**)

It is rapidly becoming clear that the current round of console wars will be the most depressing yet. I refer, of course, to the impending demise of Dreamcast and Sega.

Never has a format been more deserving of success than Sega's new console. Not only has it proved to be a beautifully balanced and flexible machine, but it has allowed developers a freedom of expression that Sony's latest effort seems to currently preclude.

With the launch of the N64, Nintendo boasted of delivering consistently high-quality software, and then manifestly failed to maintain the policy. In contrast, the Dreamcast software library is already the most consistently impressive in recent memory.

To me, the current failure of Sega's machine lies not with apathy from the dreaded 'massmarket', but stems more from the dismissive response of the industry as a whole. The initial reaction of developers (many of whom should have known better) bordered on the contemptuous, and this must surely have had a strong negative effect on sales.

I'm very afraid that the end result will be the loss of one of the greatest entertainment companies in the world. Sega execs must be shaking their heads and wondering what more they can offer gamers. One thing is certain: nobody, not even Sega, can survive such crushing financial losses.

Iain Brown, Edinburgh

You're right: if there's one thing Dreamcast has made abundantly clear, it's that game publishers have long memories.

I just thought I'd drop you a line regarding Stephen Dinkeldein's letter in E86.

Games allow us to do some pretty morally disturbing things. We lie, cheat and steal in roleplaying games. We commit murder in firstperson shooters. We leave our friends to die and kill the helpless in games of *Counterstrike* online, and in strategy games we commit atrocities beyond measure as our fantasies take us out to the stars with conquest as our aim and city-sized starships as our tools.

Oh yeah. And now we can deface public buildings and skate where we shouldn't.

My point is that for most of us it stops at the keyboard. We might bore the hell out of our spouses about it occasionally, and anybody who doesn't know the thrill of being the office 'badboy' at *UT*, *QIII* or any other LAN game is surely missing out. But we stop there. We don't, as a rule, grab a shotgun and head out into the busy high streets to bring death to a bunch of complete strangers.

Unless, of course, there's already something wrong with us.

No sane and rational human being drives like they play *Crazy Taxi*. No sane and rational human being talks like *Duke Nukem*. No sane and rational human being *actually* grabs a pistol and a rifle and relives a scene from *Soldier Of Fortune*.

And no sane and rational person would blame a game that inspires the form of an anti-social behaviour, rather than the underlying causes of the anti-social tendency.

Iain Howe, via email



James Bell cites *Ultima Online*, which encourages freedom, as a pointer for the future

'Games allow us to do some pretty morally disturbing things. **We lie, cheat, steal, commit murder** and leave our friends to die. And now we can **deface public buildings'**

In response to Stephen Dinkeldein's letter, as a long-time gamer who started playing games in the late '70s, and also someone who has been involved in the graffiti scene since the early '80s, I find what he is saying to be completely wrong. Let's put it this way: I started to go around doing graffiti not because of something I played with at home but because I was actually growing up and finding my own identity. Now, most teenagers go through that rebellious stage at some point – it's part of growing up and each individual will go about it in their own way. Other teenagers will go out and steal cars but is a game like *GTA* really to blame? I think not – cars were being stolen way before that game came on to the scene and will continue to be stolen way after that game is forgotten about, and the same applies to the graff scene. As it is, most 'writers' have got respect for private property and will go and express their art at specific 'Halls of Fame', where their art is appreciated. I find the idea of being able to play a game where an underground culture can be expressed without actually causing harm to anyone to be a good idea. Plus, it's nice to see developers coming up with fresh ideas, instead of using the same stale and tired game genres, so hats off to Sega for actually trying to be different and breaking the mould.

HYTESTER, via email

That's just two letters from an

enormous amount received in response to Stephen Dinkeldein's letter – all sharing the same fundamental sentiment. Thanks to everyone who offered their views.

I was rather amused by the interview in E85 with a certain Tom Kalinske – sorry, I mean Phil Harrison. He seems preoccupied with evangelising about what Sony and the PS2 will do for us all, while at the same time he obviously does not notice that other companies are already putting into practice some of his 'out there' ideas. The main examples are the use of digital cameras and microphones – now that is old hat. It's all very well that sometime in the future PlayStation2 is going to bring us online this and online that and be the centre of our universe, but some of us want that right here, right now. Sure the connectivity of the Sony's new console is admirable, but what about this idea that there are thousands of USB modems that can be connected? Don't these modems need drivers? Leading to the realisation that I might have two different games that require very different modems. Come on, Sony, give things a little more thought, and you might just get there. So far, and this is only early days, the PS2 has failed to impress.

Paul Barrett,
via email

I'm responding to the Prescreen editorial 'Trimming down the flab in videogames' in E85. Where are we going? That is the question. Shorter development time leads to shorter games, which then sell at a similar price to the epics. Long term, what happens? The next epic gets shorter too. Games are market driven. If we are fed tat, then tat is what we will come to expect – it's a vicious circle. Look at the PlayStation – a very impressive back catalogue of titles, until you play some of them. So much wasted design talent and development man hours for a ton of games that do little more than Game & Watch handhelds did ten years previously.

It's not about an epic story or fully laden plot. Look at *Elite*, *Privateer* and *Ultima Online* – you define your own experience. To me, it has always been about immersion. That is where we are heading; a total online immersion with friends from around the globe. Every good game immerses me and makes me part of the journey to that ultimate goal: games being the number one use of leisure time on this earth. Shorter games seem to me to be a step back.

This is fine, as long as it only marks a redefining of game goals before the next revolution. Otherwise, what have we all expensively bought into? I've always believed the initial words I read in the very first issue of **Edge**, the phrase: 'The future of interactive entertainment'. I don't want the future to be as the past.

James Bell,
via email

There was no call whatsoever for the elimination of epics. Simply get yourself a copy of *Mr. Driller* and the reasoning behind the editorial will come sharply into focus.

With the next generation of videogame systems implementing DVD as the new storage medium, I wonder whether they could revolutionise videogames as they have revolutionised movies.

'It is rapidly becoming clear that the current round of **console wars** will be the most **depressing yet**. I refer, of course, to the impending **demise of Dreamcast** and Sega.'

What I'm talking about is the featurettes and 'makings of' found on most DVDs. With the new medium's vast storage capacity it would surely be easy to give the gaming public an insight into the processes and pitfalls found in the development of the game. I'm sure there are thousands of people who would love to see footage of Shigeru Miyamoto talking about *Mario* and *Zelda*, or to see the motion-capture process for *International Superstar Soccer*. These ideas were touched on in *Virtua Fighter 3tb* on the Dreamcast, where you could access a movie file showing some of the original animations from the three *Virtua Fighter* games, as well as preliminary models and arenas. I found this intriguing and informative and I would love to see other companies expand on this.

I'm sure anyone who has had the fortune to see the 'making of' for films like 'The Matrix' and 'Blade' will agree that it adds the product as a whole, and hopefully we gamers will get to experience these features during the next generation of our industry.

Rick Huby,
via email

And I thought you had something against Sega. How wrong I was. Reading **E84** I am convinced you have a grudge against all the consoles that have ever been released.

First the Dreamcast: you seemed to expect miracles from it, giving games like *Crazy Taxi* a reasonable score, while it is (in my eyes, and others – if everyone in the newsgroups are not telling lies) a nine or ten type of game. I still play it, and it has struck me just as hard as *OutRun* did way back when. (Even now I would love to see an *OutRun* compilation on Dreamcast – imagine being able to play *OutRun*, *Turbo OutRun*, *OutRunners*). And now the PS2 has done something wrong. What did you, for example, expect from *Ridge Racer 5*? A *Gran Turismo* beater ? Come on, for Christ's sake: if you want a *Gran Turismo* game, play a *Gran Turismo* game, but don't expect arcade racers to be even mildly similar. After a long time spent playing *Ridge Racer V*, the only downsides were, in my opinion, a lack of speed (*Ridge Racer* on the PlayStation was faster) and samey backgrounds. However, it's playability that counts, and every *Ridge Racer* game plays like a dream, with tight controls and controllable powerslides.

Now, let's talk *Tekken*. This game caused everyone to stare at the screen when it first appeared on PlayStation. Now, a few years down the line, Namco is following the same road as Capcom did with

Street Fighter, but somehow Namco's game on PS2 has done something wrong. I haven't played it yet, to be honest, because I am not so into fighting games, but both Namco and Capcom's games had a sparkle that others had not. Even the mighty Sega *Virtua Fighter* games did not do it for me, but – fair is fair – in my eyes, both games have been updated too long. They should ditch them and go for something completely different, but as long as it's called *Tekken*, a game won't stray too far away from the formula, and the same goes for *Street Fighter*.

Ronald Kattevilder,
The Netherlands

Sorry, Ronald, but you blew it as soon as you made the same mistake so many others do with your perception of what **Edge**'s seven out of ten means.

As the universal acclaim for *Perfect Dark* pours forth, I have little doubt that **Edge** too will join in singing its praises. But does it displace *Half- Life* as the leading firstperson shooter in the multiformat stakes? As a PC and N64 owner I have to come down on *Half-Life*'s side, particularly when you add the *Opposing Force* and *Team Fortress* expansions into the equation (leaving aside other unofficial mods and add-ons). I found your placement of *GoldenEye* and *Quake 2* ahead of *Half-Life* in your Top 100 list as misguided, perhaps attributed to their 'classic' status as opposed to them being better in absolute terms. Although *Perfect Dark* will no doubt be a brilliant game, I can't see it surpassing the *Half-Life* package in terms of AI, graphics, sound, level design, variety, set pieces and atmosphere. Would **Edge** care to share its two cents' worth?

Alex,
via email

Out of the box, *Perfect Dark* is the better game, although its obvious lack of expandability counts against it. Which leaves no clear winner. But you absolutely must play *Perfect Dark*, at all costs.

I think it's commendable that **Edge** provides people that aspire to enter the industry with info about the way it all works. I was one such person six years ago, who clung to every such report. But having been here since, and having my fair share of T-shirts, I can't help but feel that reports like the supplement of two months ago, or indeed Demis Hassabis' reports, paint too romantic a picture that will probably fall short of most people's reality. I think it would probably be beneficial to present my experience as a programmer so people can have a balanced outlook. I'll be quite terse, so I can cram it all in. First, I worked for what is probably the biggest publisher in the world. My first game was cancelled, the second was released (a household name franchise) for which I got the awesome completion bonus of £500! Third game was cancelled, and when the company decided to move 30 miles away with less than two months notice, I had to leave as I had no car for such commuting. So I went to work for one of Europe's premier developers. My studio was closed and my team was the only one not made redundant. We moved to another site and a few months later the game was cancelled. A few more months and the company decided to stop developing for the PC, so I (and a fair few others) got the chop. On to the third company, a small outfit led by an industry veteran who has featured in a recent **Edge** issue. After realising that we did not get any payslips, and receiving a contract three months into employment with terms I just could not agree with, I got cold feet and left (the game was canned shortly after, anyway). On to work for a prominent publisher that has been making headlines with acquisitions. Nice company, shame that they decided to close my studio and make us redundant on December 17 last year. Merry Christmas, ho ho ho, and all that. I have opted not to mention the companies' names here as my experience isn't necessarily representative of what they normally do or will do in the future; and let me stress that I worked in teams as capable and keen as the ones that make it big. Anyway, after five years and all this I decided to take a breather and I'm currently not in the industry. I expect my case might be extreme but your readers should know that it *can* happen to them, so that they can make an informed decision. The games industry is as exciting as it is volatile. *Caveat emptor*.

Miguel Melo,
via email

'My body, mind and senses function on a level far in excess of **anything that can be simulated** on a computer, now or any time in **the near to medium future'**

Scott Scott (Viewpoint, **E**85) talks about how games are not that true to life in the current stage of computer gaming. I do agree with him, but there was one thing that he said that concerns me: 'look to *Metal Gear Solid* as an example of the best a console has achieved – Dreamcast is yet to deliver an equivalent'.

Let's consider what he has said shall we? *MGS* is a game where you take the role of a one-man army against a limitless horde of genetically modified terrorists as well as a ninja in an exoskeleton suit with chameleon-like abilities. Not to mention a towering bipedal tank with magnetic-propelled nuclear missiles. Real?

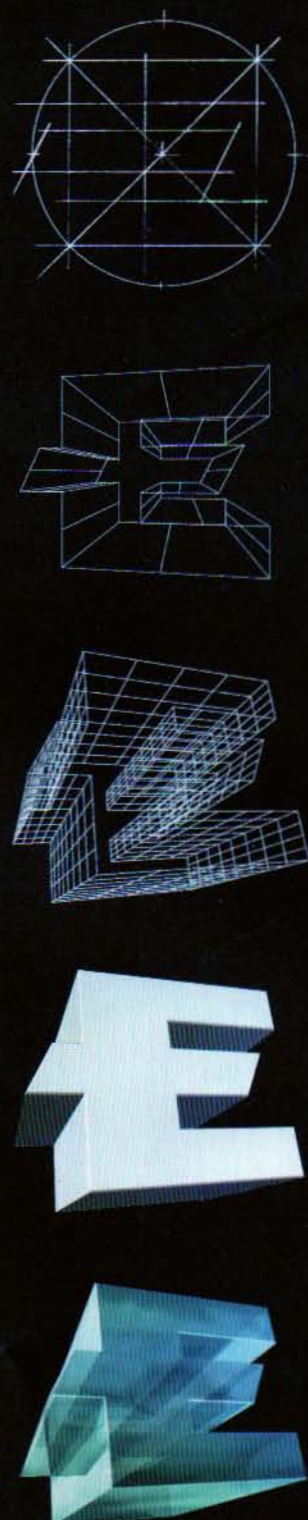
Second, concerning the Dreamcast, one word: *Shenmue*. Need I say more?

Daniel Corneau,
via email

Artificial sensory assistance, indeed. I don't know about Jason Wells (Viewpoint, **E**85), but my body, mind and senses function on a level far in excess of anything that can be simulated on a computer, now or any time in the near to medium future. Games are meant to be fun to play and anyone who has been playing games for some time will tell you that this does not require AI, ASA or anything else, just a fun, interesting challenge. Pass me the *GoldenEye* after I've finished with the *Chu Chu Rocket*.

Jeff Mindlin,
via email

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